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* * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * * SESSION RESUMED IN FILE 'REGISTRY' AT 15:53:09 ON 27 NOV 2007 FILE 'REGISTRY' ENTERED AT 15:53:09 ON 27 NOV 2007 COPYRIGHT (C) 2007 American Chemical Society (ACS) COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 1.35 193.58 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE 0.00 -1.56 => file reg COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 1.35 193.58 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE 0.00 -1.56

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STRUCTURE FILE UPDATES: 26 NOV 2007 HIGHEST RN 955995-34-3 DICTIONARY FILE UPDATES: 26 NOV 2007 HIGHEST RN 955995-34-3

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TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

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http://www.cas.org/support/stngen/stndoc/properties.html

=>
Uploading C:\Program Files\Stnexp\Queries\10-556,931a.str





chain nodes : 11 19 ring nodes : 1 2 3 4 5 6 7 8 9 10 12 13 14 15 16 17 20 25 26 27 28 29 30 31 32 chain bonds : 11-12 15-19 19-20 ring bonds : 1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 12-13 12-17 13-14 14-15 15-16 16-17 20-25 20-28 25-26 25-29 26-27 26-32 27-28 29-30 30-31 31-32 exact/norm bonds : 1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 11-12 12-13 12-17 13-14 14-15 15-16 15-19 16-17 19-20 20-25 20-28 25-26 25-29 26-27 26-32 27-28 29-30 30-31 31-32

G1:C,N

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:CLASS 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 19:CLASS 20:Atom 25:Atom 26:Atom 27:Atom 28:Atom 29:Atom 30:Atom 31:Atom 32:Atom 35:Atom

L7 STRUCTURE UPLOADED

=> d 17

L7 HAS NO ANSWERS

L7 STR

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

Structure attributes must be viewed using STN Express query preparation.

=> s 17 sss sam

SAMPLE SEARCH INITIATED 15:55:21 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 684 TO ITERATE

100.0% PROCESSED 684 ITERATIONS

9 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS:

12111 TO 15249

PROJECTED ANSWERS:

9 TO 360

L8

9 SEA SSS SAM L7

=> d scan

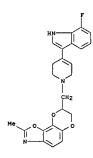
L8 9 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN 1, 4-Benzodioxin-6-amine, 2-{[4-{5-fluoro-1H-indol-3-y1}-3,6-dihydro-1(2H)-pyridinyl]methyl-2,3-dihydro-MF C2Z H2Z F N3 OZ

0 CH2 N H

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L8 9 ANSMERS REGISTRY COPYRIGHT 2007 ACS on STN IN [1,4]Dioxino[2,3-g]benzoxazole, 8-[4-{7-fluoro-1H-indol-3-y1}-3,6-dihydro-1(2H)-pyridinyl]-7,8-dihydro-2-methyl-MF C24 H22 F N3 03



**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT **

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L0 9 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
1,4-Dioxino[2,3-f]quinoxaline, 2-[(3,6-dihydro-4-(1H-indol-3-yl)-1(2H)pyridinyl]methyl]-8,9-diethyl-2,3-dihydro-, (2S)MF C28 H30 N4 02

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L8 9 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN 1N 7H-Pyrano[2,3-f]-1,4-benzodloxin-7-one, 2-[[3,6-dlhydro-4-(lh-indol-3-y-1)- 1(2H)-pyridinyl]methyl]-2,3,8,9-tetrahydro-, (2S)-NF C25 H24 N2 04

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> s 17 sss full FULL SEARCH INITIATED 15:56:48 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 13401 TO ITERATE

100.0% PROCESSED 13401 ITERATIONS

222 ANSWERS

SEARCH TIME: 00.00.01

L9 222 SEA SSS FUL L7

=> file caplus
COST IN U.S. DOLLARS

SINCE FILE TOTAL

FULL ESTIMATED COST

ENTRY SESSION 174.35 367.93

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE TOTAL

ENTRY SESSION 0.00 -1.56

CA SUBSCRIBER PRICE

FILE 'CAPLUS' ENTERED AT 15:57:13 ON 27 NOV 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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FILE COVERS 1907 - 27 Nov 2007 VOL 147 ISS 23 FILE LAST UPDATED: 26 Nov 2007 (20071126/ED)

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http://www.cas.org/infopolicy.html

=> s 19

L10 25 L9

=> d ibib abs hitstr 1-YOU HAVE REQUESTED DATA FROM 25 ANSWERS - CONTINUE? Y/(N):y

10-556,931.trn L10 ANSWER 1 OF 25 CAPLUS COPYRIGHT 2007 ACS ON STN
ACCESSION NUMBER: 2004:1059361 CAPLUS
DOCUMENT NUMBER: 142:38264
TITLE: Preparation of indole Preparation of indole derivatives with an improved antipsychotic activity Bartolome-Nebreda, Jose Manuel; Andres-Gil, Jose INVENTOR (S): Janssen Pharmaceutica N.V., Belg. PATENT ASSIGNEE(S): SOURCE: POT Int. Appl., 43 pp. CODEN: PIXXD2 Patent English 2 DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: MO 2004106346 A1 20041209 WO 2004-EP50922 20040526
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, NM, MM, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: EW, GH, GM, KE, LS, NM, MZ, NA, SI, SZ, TZ, UG, ZM, ZW, AM, AZ, GH, GM, KE, LS, NM, MZ, NA, SI, SZ, TZ, UG, ZM, ZW, AM, AZ, GH, SK, TR, BF, BJ, CP, CG, CI, CM, GA, GQ, GW, ML, MR, NE, SN, TD, TG
WC 2004106298 A1 20041209 WO 2003-EP305789 WO 2004106298 A1 20041209 WO 2003-EP305789 20030530 W: US
RM: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR
AU 2004242802 A1 20041209 AU 2004-242802 20040526 EP 1636239 A1 20061032 EP 2004-71649 20040526 EP 1636239 B1 20070718
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, JP 2006528957 US 2007066608 PRIORITY APPLN. INFO.: 20040526 20051116 A 20030530 20061228 20070322 WO 2003-EP305789 A 20030530 WO 2004-EP50922 W 20040526 OTHER SOURCE(S): MARPAT 142:38264 * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT * L10 ANSWER 1 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) CAPLUS 1,4-Dioxino[2,3-c]pyridine, 3-[(4-(4-fluoro-1H-indol-3-y1)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-, ethanedioate (9CI) (CA INDEX NAME) CM 1 805232-47-7 C21 H20 F N3 O2 2 CM о о || || но- с- с- он 805232-50-2 CAPLUS
1,4-Dioxino[2,3-c]pyridine, 3-[[4-(5-bromo-lH-indol-3-y1)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-, ethanedioate (9CI) (CA INDEX NAME) CM .1 CRN 805232-49-9 CMF C21 H20 Br N3 O2

L10 ANSWER 1 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

AB The present invention relates to a novel indole derivs. I [al:a2a3:a4 = N:CHCH:CH, CH:NCH:CH, CH:CHN:CH, CH:CHCH:N; 2122 = OCH2O, O(CH2)2O, S(CH2)2O, etc.; X = CR6, N; R1-R4, R6 = H, Halo, CN, etc.; p = O-3; R5 = H, alkyl; Y = NR8(CH2)n, II, III, etc.; m = O-1; n = 0-6; R8 = H, halo, alkyl, etc.; with the proviso] and their pharmaceutically acceptable acid or base addition salts that exhibit a binding affinity towards dopamine receptors, in particular towards dopamine D2, D3 and D4 receptors, with selective serotonin reuptake inhibition properties and acting as 5-HTIA agonists or pertial agonists. E.g., a multi-step synthesis of IV, starting from 2-chloro-3-pyridinamine, which showed pIC50 of 6.7 and 7.1 egainst D2 and D3 receptor binding, resp., was given. The invention also relates to pharmaceutical compns. comprising the compds. I, the use thereof for the prevention and/or treatment of a range of psychiatric and neurol. disorders, in particular certain psychotic disorders, most in particular schizophrenia and processes for their production

1T 473996-02-09 805230-14-29 805230-15-39 805232-80-805232-50-29 805232-55-89 805232-53-79 805232-55-97 805232-66-89 805232-66-89 805232-66-89 805232-67-89 805232-67-80 805232-6 (Uses)
(preparation of indole derivs. with an improved antipsychotic activity)
RN 473996-82-6 CAPLUS
CN 1,4-Dioxino[2,3-b]pyridine, 3-{[4-(5-fluoro-1H-indol-3-y1)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro- {CA INDEX NAME} 805230-14-2 CAPLUS 1,4-Dioxino[2,3-c]pyridine, 3-[[4-(5-fluoro-lH-indol-3-yl)-3,6-dihydro-1[2H-pyridinyl]methyl}-2,3-dihydro- (CA INDEX NAME) 805230-15-3 CAPLUS 1,4-Dioxino[2,3-c]pyridine, 3-{[4-(5-fluoro-lH-indol-3-yl}-1-piperidinyl]methyl}-2,3-dihydro- (CA INDEX NAME) L10 ANSWER 1 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN CMF C2 H2 O4 (Continued) но- c- c- он 805232-52-4 CAPLUS 1,4-Dioxino[2,3-c]pyridine, 3-[[3,6-dihydro-4-(5-nitro-1H-indol-3-yl)-1(2H)-pyridinyl]methyl]-2,3-dihydro-, ethanedioate (9CI) (CA INDEX NAME) СМ CRN 805232-51-3 CMF C21 H20 N4 O4 CM 2 CRN 144-62-7 CMF C2 H2 O4 о о || || но- с- с- он Rotation (-). 805232-54-6 CAPLUS
1,4-Dioxino[2,3-c]pyridine, 3-[(3,6-dihydro-4-(5-nitro-1H-indol-3-yl)-1(2H)-pyridinyl]methyl]-2,3-dihydro-, (+)- (CA INDEX NAME)

Rotation (+).

Page 6

CRN 144-62-7

L10 ANSWER 1 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

805232-56-8 CAPLUS 1,4-Dioxino[2,3-c]pyridine, 3-[[4-(7-fluoro-lH-indol-3-y1)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-, ethanedioate (9CI) (CA INDEX NAME)

CRN 805232-55-7 CMF C21 H20 F N3 O2

CM 2

CRN 144-62-7 CMF C2 H2 O4

о о || || но- с- с- он

805232-57-9 CAPLUS
1,4-Dioxino[2,3-c]pyridine, 3-{[4-{5-fluoro-1H-indol-3-yl}-1-piperidinyl]methyl}-2,3-dihydro-, ethanedioate {9CI} (CA INDEX NAME)

CM 1

CRN 805230-15-3 CMF C21 H22 F N3 O2

L10 ANSWER 1 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

805232-61-5 CAPLUS
IH-Indole-5-carbonitrile, 3-{1-[(2,3-dihydro-1,4-dioxino{2,3-c}pyridin-3-yl)methyl]-4-piperidinyl|- (CA INDEX NAME)

805232-62-6 CAPLUS IN-Indole-5-cathonitrile, 3-[1-[(2,3-dihydro-1,4-dioxino[2,3-c]pyridin-3-yl)methyl]-4-piperidinyl]-, (-)- (CA INDEX NAME)

805232-63-7 CAPLUS
1H-Indole-5-carbonitrile, 3-[1-[(2,3-dihydro-1,4-dioxino[2,3-c]pyridin-3-yl)methyl]-4-piperidinyl]-, (+)- (CA INDEX NAME)

Rotation (+).

CAPLUS 1,4-Dioxino[2,3-c]pyridine, 3-[[4-(6-fluoro-lH-indol-3-y1)-1-piperidinyl]methyl]-2,3-dihydro-, ethanedioate (9CI) (CA INDEX NAME) CM 1

Page 7

L10 ANSWER 1 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

CRN 144-62-7 CMF C2 H2 O4

но- с- с- он || || 0 о

805232-59-1 CAPLUS
1,4-Dioxino[2,3-c]pyridine, 3-[[4-(5-chloro-1H-indol-3-yl)-1-piperidinyl]methyl]-2,3-dihydro-, ethanedioate (9CI) (CA INDEX NAME)

CRN 805232-58-0 CMF C21 H22 C1 N3 O2

CM 2

CRN 144-62-7 CMF C2 H2 O4

о о || || но- с- с- он

RN 805232-60-4 CAPLUS CN 1H-Indol-5-ol, 3-{1-{2,3-dihydro-1,4-dioxino{2,3-c}pyridin-3-yl}methyl}-4-piperidinyl}- (CA INDEX NAME)

L10 ANSWER 1 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN CRN 805232-64-8 CMF C21 H22 F N3 O2 (Continued)

CM 2

но- с- с- он

805232-66-0 CAPLUS
1,4-Dioxino[2,3-c]pyridine, 3-{{4-{7-fluoro-1H-indol-3-y1}-1-piperidinyl]methyl}-2,3-dihydro- {CA INDEX NAME}

805232-69-3 CAPLUS
1,4-Dioxino[2,3-c]pyridine, 3-[[4-[[5-fluoro-1H-indol-3-y1]methyl]-1-piperidinyl]methyl]-2,3-dihydro-, ethanedioate (9CI) (CA INDEX NAME)

CM 1

CRN 805232-68-2 CMF C22 H24 F N3 O2

CM 2

CRN 144-62-7 CMF C2 H2 O4

L10 ANSWER 1 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

REFERENCE COUNT: THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L10 ANSWER 2 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

ANSWER 2 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
The present invention relates to a novel indole derivs. I (al:a2a3:a4 = N:CHCH:CH, CH:CHCH:H, CH:CHCH:H, Z122 = OCH2O, O(CH2)2O, S(CH2)2O, etc.; X = CR6, N; R1-R4, R6 = H, halo, CN, etc.; p = 0-3; R5 = H, alkyl; Y = NR8 (CH2)n, II, III, etc.; m = 0-1; n = 0-6; R8 = H, halo, alkyl, etc.; with the proviso) and their pharmaceutically acceptable acid or base addition salts that exhibit a binding affinity towards dopamine receptors, in particular towards dopamine D2, D3 and D4 receptors, with selective serotonin reuptake inhibition properties and acting as 5-HTIA agonists or partial agonists. E.g., a multi-step synthesis of IV, starting from 2-chloro-3-pyridinamine, which showed pIC50 of 6.7 and 7.1 against D2 and D3 receptor binding, resp., was given. The invention also relates to pharmaceutical compns. comprising the compds. I, the use thereof for the prevention and/or treatment of a range of psychiatric and neurol. disorders, in particular certain psychotic disorders, most in particular schizophrenia and processes for their production 805230-14-2P 805230-15-3P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Blological study); PREP (Preparation); USES (Uses)

(preparation of indole derivs, with an improved antipsychotic

(preparation activity)

RN 805230-14-2 CAPLUS

CN 1,4-Dioxino[2,3-c]pyridine, 3-[[4-(5-fluoro-lH-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro- (CA INDEX NAME)

805230-15-3 CAPLUS 1,4-Dioxino[2,3-c]pyridine, 3-[[4-(5-fluoro-1H-indol-3-yl)-1-piperidinyl]methyl]-2,3-dihydro- (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L10 ANSWER 2 OF 25 CAPLUS COPYRIGHT 2007 ACS ON STN
ACCESSION NUMBER: 2004:1059319 CAPLUS
DOCUMENT NUMBER: 142:38263
TITLE: Prenaration - - -142:38263 Preparation of indole derivatives with an improved antipsychotic activity Bartolome-Nebreda, Jose Manuel; Andres-Gil, Jose INVENTOR (S): Battolome-Nebreda, Jose Manuel: Al Ignacio Janssen Pharmaceutica N.V., Belg. PCT Int. Appl., 40 pp. CODEN: PIXXD2 Patent English 2 PATENT ASSIGNEE(S): SOURCE: DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE WO 2004106298 A1 20041209 WO 2003-EP5789 20030530 W: US 2004106299 A1 20041209 W0 2003-EP5789 20030330 W: US RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NIL, PT, RO, SE, SI, SK, TR AU 2004242802 A1 20041209 AU 2004-242802 20040526 CA 2525282 A1 20041209 CA 2004-2525282 20040526 W0 2004106346 A1 20041209 W0 2004-EP50922 20040526 2004106346 A1 20041299 NO 2004-2P59922 20040526
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, II, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, AA, NA, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RWI BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AA,
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
SI, SK, KT, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
SN, TD, TG
1636239 A1 20060322 EP 2004-741648 EP 1636239 A1 20060322 EP 2004-741649 20040526 EP 1636239 B1 20070718 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK,

20061228 20070815 20070322 JP 2006-530219 AT 2004-741649 US 2005-556931 WO 2003-EP305789 JP 2006528957 T T 20040526 AT 367392 US 2007066608 PRIORITY APPLN. INFO.: A 20030530 WO 2003-EP5789 A 20030530

> WO 2004-EP50922 w 20040526

OTHER SOURCE(S): MARPAT 142:38263

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

L10 ANSWER 3 OF 25 CAPLUS COPYRIGHT 2007 ACS ON STN
ACCESSION NUMBER: 2004:331786 CAPLUS
DOCUMENT NUMBER: 140:357375
TITLE: Predaration of the company of th 140:357375
Preparation of antidepressant azaheterocyclylmethyl derivatives of 2,3-dihydro-1,4-dioxino[2,3-

INVENTOR (S):

derivatives or 2,3-dinydro-1,4-dioxino[2,3-fiquinoxaline Gross, Jonathan L.; Stack, Gary P. Wyeth, John, and Brother Ltd., USA U.S. Pat. Appl. Publ., 12 pp., Cont.-in-part of U.S. Ser. No. 128,722. CODEN: USXXCO PATENT ASSIGNEE(S): SOURCE:

Patent English

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004077652	A1	20040422	US 2003-618947	20030714
US 7008944	B2	20060307		
US 2002183329	A1	20021205	US 2002-128722	20020423
US 6617327	B2	20030909		
PRIORITY APPLN. INFO.:			US 2001-286438P P	20010426
			US 2002-128722 A2	2 20020423

OTHER SOURCE(S): MARPAT 140:357375

The title compds. $\{I; R1, R4-R6, R8 = H, OH, halo, etc.; R2, R3 = H, alky1, halo, OH, CN, NH2; R7 = H, alky1; <math>Z = CR8, N; n = 0-2\}$, useful for the treatment of depression and other diseases such as obseasive

L10 ANSWER 3 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) compulsive disorder, panic attacks, generalized anxiety disorder, sexual dysfunction, eating disorders, obesity,

anxiety disorder, sexual dysfunction, eating disorders, obesity, addictive disorders caused by ethanol or cocaine abuse and related illnesses, were prepd. Thus, reacting (2R)-2,3-dihydro(1,4]dioxino(2,3-f]quinoxilin-2-ylmethyl 4-methylbenzenesulfonate (multi-step synthesis given) with 5-fluoro-3-(1,2,3,6-tetrahydro-4-pyridinyl)-lH-indole afforded 74% (S)-II which showed Ki of 17.72 nM against 5-HTIA receptor binding.

IT 474607-96-0P 474607-097-1P 474607-98-2P 474607-99-3P 474608-00-9P 474608-00-P (Florenzetic) (Bloogical setivity); SPN (Synthetic preparation); THU (Therapeutic use); BTOL (Blological study); PREP (Preparation); USES (Uses) (preparation of antidepressant azaheterocyclylmethyl derivs. of

(Uses)

(preparation of antidepressant azaheterocyclylmethyl derivs. of 2,3-dihydro-1,4-dioxino[2,3-f]quinoxaline)

RN 474607-96-0 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoxaline,
2-[[4-(5-fluoro-1H-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-,(2S)- (CA INDEX NAME)

Absolute stereochemistry.

474607-97-1 CAPLUS 1,4-Dioxino[2,3-f]quinoxaline, 2-[[3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-pyridinyl]methyl]-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

L10 ANSWER 3 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474608-00-9 CAPLUS 1,4-Dioxino[2,3-f]quinoxaline, 2-[[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl]-8,9-diethyl-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 474608-01-0 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoxaline,
8,9-diethyl-2-[[4-(5-fluoro-lH-indol-3-yl)3,6-dihydro-1(2H)-pyridinyl)methyl]-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

L10 ANSWER 3 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474607-98-2 CAPLUS
1,4-Dioxino[2,3-f]quinoxaline, 2-[[3,6-dihydro-4-(lH-indol-3-yl)-1(2H)-pyridinyl]methyl]-2,3-dihydro-8,9-dimethyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

474607-99-3 CAPLUS
1.4-Dioxino[2,3-f]quinoxaline,
4-(5-f]uoro-lH-indol-3-yl]-3.6-dihydro1(2H)-pyridinyl]methyl]-2,3-dihydro-8,9-dimethyl-, (2S)- (CA INDEX NAME)

L10 ANSWER 3 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

REFERENCE COUNT:

THERE ARE 23 CITED REFERENCES AVAILABLE FOR

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L10 ANSWER 4 OF 25 CAPLUS COPYRIGHT 2007 ACS ON STN
ACCESSION NUMBER: 2004:41125 CAPLUS
DOCUMENT NUMBER: 140:94051
TITLE: 160:94051
INVENTOR(S): Stack, Gary P.
PATENT ASSIGNEE(S): Wyeth, John, and Brother Ltd., USA
U.S. Pat. Appl. Publ., 13 pp., Cont.-in-part of U.S.
PATENT ASSIGNEE (S): Pat. Appl. 2002 183,351.
CODEN: USXXCO
PATENT TYPE: English
FAMILY ACC. NUM. COUNT: English
FAMILY ACC. NUM. COUNT: PATENT INFORMATION: DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
		0000000		
US 2004010006	Al	20040115	US 2003-420333	20030422
US 6927226	B2	20050809		20000402
US 2002183351	A1	20021205	US 2002-128762	20020423
US 6573283	B2	20030603		
PRIORITY APPLN. INFO.:			US 2001-286579P	P 20010426
			US 2002-128762	20020423

OTHER SOURCE(S):

MARPAT 140:94051

L10 ANSWER 4 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 1

CRN 474623-47-7 CMF C24 H20 F4 N4 O2

Absolute stereochemistry.

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

INDEX

Absolute stereochemistry.

L10 ANSWER 4 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

AB The title compds. [I: R1-R5, R8 = H, halo, CN, etc.: R6, R7 = H, alkyl: Z = CR8, N; n = 0-2], useful for the treatment of depression and other diseases such as obsessive compulsive disorder, panic attacks, generalized

relized anxiety disorder, social anxiety disorder, sexual dysfunction, eating disorders, obesity, addictive disorders caused by ethanol or cocaine

disorders, obesity, addictive disorders caused by ethanol or cocaine abuse

and related illnesses, were prepared Thus, reacting
[(8R)-2-trifluoromethyl7.8-dihydro-3H-6.9-dioxa-1,3-diaza-cyclopenta[a]naphthalen-8-yl]methyl
4-methylbenzenesulfonate (multi-step synthesis given) with
5-fluoro-3-(1,2,3.6-tetrahydro-4-pyridinyl)-IH-indole in OMSO afforded
(S)-II which showed Ki of 3.07 nN against 5-HTIA receptor binding.

IT 474623-43-P9 474623-48-BP 474623-59-1P
474623-63-5P 474623-64-BP 474623-77-3P
474623-69-3P 474623-77-3-P
474623-69-3P 474623-77-3-P
474623-99-9P
RL: PRC (Pharmacological activity); SPN (Synthetic preparation); USES
(Uses)
(Uses)
(preparation of antidepressant azaheterocyclymethyl derivs. of
7.8-dihydro-3H-6.9-dioxa-1,3-diazecyclopenta[a]naphthalene)
RN 474623-47-7 CAPLUS

RN 474623-47-7 CAPLUS

Absolute stereochemistry.

Absolute stereochemistry.

474623-48-8 CAPLUS
IH-[1,4]Dioxino[2,3-e]benzimidazole, 8-[4-(5-fluoro-lH-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl]methyl]-7,8-dihydro-2-(trifluoromethyl)-, (8S)-, (2E)-2-butenedioate (2:1) (9CI) (CA INDEX NAME)

L10 ANSWER 4 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474623-53-5 CAPLUS
1H-[1,4]Dioxino[2,3-e]benzimidazole, 8-[[3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-pyridinyl]methyl]-7,8-dihydro-2-(trifluoromethyl)-, (8S)-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 474623-51-3 CMF C24 H21 F3 N4 O2

Absolute stereochemistry.

СМ

Double bond geometry as shown.

L10 ANSWER 4 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) но2с Е со2н

474623-56-8 CAPLUS
1H-[1,4]Dioxino[2,3-e]benzimidazole, 8-[[4-(6-fluoro-1H-indol-3-y1)-3,6-dihydro-1(2H)-pyridinyl]methyl]-7,8-dihydro-2-(trifluoromethyl)-, (8S)-, (2E)-2-butenedioate (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 474623-55-7 CMF C24 H20 F4 N4 O2

Absolute stereochemistry.

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

474623-59-1 CAPLUS $\frac{1}{1} + \frac{1}{1} + \frac{1}$

CM 1 CRN 474623-58-0

L10 ANSWER 4 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474623-64-8 CAPLUS
1H-[1,4]Dioxino[2,3-e]benzimidazole, 8-[[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl]-7,8-dihydro-1,2-dimethyl-, (8S)-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CRN 474623-61-5 CMF C25 H26 N4 O2

Absolute stereochemistry.

СМ 2

Double bond geometry as shown.

Page 11

L10 ANSWER 4 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN CMF C24 H24 N4 O2 (Continued)

Absolute stereochemistry.

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

474623-61-5 CAPLUS
1H-[1,4]Dioxino[2,3-e]benzimidazole, 8-[{3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-pyridinyl]methyl]-7,8-dihydro-1,2-dimethyl-, (8S)- (CA INDEX NAME)

L10 ANSWER 4 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) HO2C E CO2H

474623-67-1 CAPLUS | H-[1,4]Dioxino[2,3-e]benzimidazole, 8-[[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl]-2-ethyl-7,8-dihydro-, (8S)- (CA INDEX NAME)

Absolute stereochemistry.

474623-69-3 CAPLUS

4/4023-09-3 (APU)
H+[1,4]Doxino[2,3-e]benzimidazole, 8-[[3,6-dihydro-4-(1H-indol-3-yl)1(2H)-pyridinyl]methyl]-2-ethyl-7,8-dihydro-, (8S)-, (2E)-2-butenedioate
(1:1)-[07] (CA INDEX NAME)

CM 1

)

CRN. 474623-67-1 CMF C25 H26 N4 O2

L10 ANSWER 4 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2 CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

но2с Е со2н

CRN 474623-72-8 CMF C24 H20 F4 N4 O2

Absolute stereochemistry.

2 CM

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

L10 ANSWER 4 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

REFERENCE COUNT: THIS

THERE ARE 19 CITED REFERENCES AVAILABLE FOR

FORMAT

RECORD. ALL CITATIONS AVAILABLE IN THE RE

L10 ANSWER 4 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

но2с Е со2н

 $474623-77-3 \quad CAPLUS \\ 1H-[1,4]Dioxino[2,3-e]benzimidazole, 8-[3,6-dihydro-4-(1H-indol-3-yl)-1(2H-pyridinyl]methyl]-7,8-dihydro-2-(pentafluoroethyl)-, (8S)-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)$

CRN 474623-76-2 CMF C25 H21 F5 N4 O2

Absolute stereochemistry.

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

474623-99-9 CAPLUS
1H-[1,4]Dioxino(2,3-e|benzimidazole, 8-[(3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl)methyl)-7,8-dihydro-2-methyl- (CA INDEX NAME)

Patent English 2

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	US 2003236241	A1	20031225	US 2003-390478	20030317
	US 7041683	B2	20060509		
	US 2002193400	A1	20021219	US 2002-128447	20020423
	US 6559169	B2	20030506		
PRIC	RITY APPLN. INFO.:			US 2001-286056P	P 20010424
				US 2002-128447	A1 20020423
				US 2002-128477	A2 20020423

OTHER SOURCE(S):

MARPAT 140:42186

The title compds. (I; R1, R2 = H, halo, CN, etc.; R3-R5, R7 = H, halo,

etc.; R6 = H, alkyl; X = CR7, N; n = 0-2] and/or their pharmaceutically acceptable salts, useful for the treatment of depression and other conditions such as obsessive compulsive disorder, panic attacks,

L10 ANSWER 5 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) generalized anxiety disorder, sexual dysfunction, eating disorders, addictive disorders caused by ethanol or cocaine abuse and related illneases, were prepd. Thus, reacting 2,3-dihydro-benzo[1,4]dioxin-2-ylmethyl 4-methylbenzenesulfonate with 5-methoxy-3-(1,2,3,6-tetrahydro-4-pyridinyl)-1H-indole in the presence of NaHCO3 in DMF/THF fiforded II which showed Ki of 27.18 mM against 5-HTIA receptor binding.

1T 473993-79-2P 473993-80-5P 473993-81-6P 473993-82-9P 473993-80-7P 473993-88-1P 473993-88-1P 473993-88-1P 473993-88-1P 473993-88-1P 473993-88-1P 473993-88-1P 473993-99-7P 473993-98-1P 473993-98-1P 473993-99-P 473993-99-P 473993-94-1P 473994-01-3P RL: PRC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(Uses)
(preparation of antidepressant azaheterocyclylmethyl derivs. of 2,3-dihydro-1,4-benzodioxane)
4393-79-2 CAPLUS
1H-Indole, 3-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-1,2,3,6-tetrahydro-4-pyridinyl]-5-methoxy- (CA INDEX NAME)

473993-80-5 CAPLUS
1H-Indole, 3-[1-1(2,3-dihydro-1,4-benzodioxin-2-yl)methyli-1,2,3,6-tetrahydro-4-pyridinyl)-5-fluoro- (CA INDEX NAME)

473993-81-6 CAPLUS
1,4-Benzodioxin-6-amine, 3-[[3,6-dihydro-4-{1H-indol-3-yl}-1{2H}-pyridinyl]methyl]-2,3-dihydro-, (3S)- (CA INDEX NAME)

Absolute stereochemistry.

L10 ANSWER 5 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

473993-85-0 CAPLUS
1R-Indole-5-carbonitrile, 3-[1-{{(28)-2,3-dihydro-8-methoxy-1,4-benzodioxin-2-yl}methyl)-1,2,3,6-tetrahydro-4-pyridinyl}-,
monohydrochloride (9C1) (CA INDEX NAME)

Absolute stereochemistry.

473993-86-1 CAPLUS
1H-Pyrrolo[2,3-b]pyridine, 3-[1-[[(2S)-2,3-dihydro-8-methoxy-1,4-benzodioxin-2-yl]methyl]-1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX

Absolute stereochemistry.

473993-87-2 CAPLUS

RN 473993-87-2 CAPLUS CN 1H-Indole, 3-[1-[[(2S)-2,3-dihydro-8-methoxy-1,4-benzodioxin-2-y1]methyl]-

Page 13

L10 ANSWER 5 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

473993-82-7 CAPLUS 1,4-Benzodioxin-6-amine, 2-[[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl)methyl)-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

473993-83-8 CAPLUS

NN 473939-03-0 GREDO 1H-Indole, 3-[1-{[(25)-2,3-dihydro-8-methoxy-1,4-benzodioxin-2-yl]methyl}-1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 473993-84-9 CAPLUS
CN 1,4-Benzodioxin-6-amine,
2-{[4-(5-fluoro-ll+indol-3-yl)-3,6-dihydro-1(2H)pyridinyl)methyl)-2,3-dihydro-, (2S)- (CA INDEX NAME)

L10 ANSWER 5 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Con 1,2,3,6-tetrahydro-4-pyridinyl)-6-fluoro- (CA INDEX NAME) (Continued)

Absolute stereochemistry.

473993-88-3 CAPLUS

1,4-Benzodioxin-5-carboxamide, 2-[{3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-pyridinyl)methyl}-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 473993-89-4 CAPLUS
CN 1,4-Benzodioxin-5-carboxamide,
2-[[4-(5-fluoro-1H-indol-3-yl)-3,6-dihydro1(2H)-pyridinyl)methyl)-2,3-dihydro(CA INDEX NAME)

Absolute stereochemistry.

473993-90-7 CAPLUS
1H-Indole, 3-[1-[{2S}-8-fluoro-2,3-dihydro-1,4-benzodioxin-2-yl}methyl]1,2,3,6-tetrahydro-4-pyridinyl}- (CA INDEX NAME)

L10 ANSWER 5 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 473993-91-8 CAPLUS CN 1H-Indole, 3-{1-[-([29]-2,3-dihydro-7-methoxy-1,4-benzodioxin-2-y1]methyl]-1,2,3,6-tetrahydro-4-pyridinyl}- (CA INDEX NAME)

Absolute stereochemistry.

473993-92-9 CAPLUS
1H-Indole, 3-[1-[[(2S)-2,3-dihydro-8-methyl-1,4-benzodioxin-2-yl}methyl]-1,2,3,6-tetrahydro-4-pyridinyl]-5-fluoro- (CA INDEX NAME)

Absolute stereochemistry.

473993-93-0 CAPLUS
1H-Indole, 3-[1-[(2,3-dihydro-1,4-benzodioxin-2-y1)methyl]-1,2,3,6tetrahydro-4-pyridinyl]-5-methoxy-, ethanedioate (1:1) (CA INDEX NAME)

L10 ANSWER 5 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

473994-01-3 CAPLUS
1H-Indole, 3-[1-[[(2S)-2,3-dihydro-8-methyl-1,4-benzodioxin-2-yl]methyl]-1,2,3,6-tetrahydro-4-pyridinyl]-5-fluoro-, ethanedioate (1:1) (CA INDEX NAME)

CM 1

CRN 473993-92-9 CMF C23 H23 F N2 O2

Absolute stereochemistry.

CM 2

CRN 144-62-7 CMF C2 H2 O4

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473993-95-2P 473993-96-3P 473993-97-4P
RL: RCT (Reactant): SPM (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of antidepressant azaheterocyclylmethyl derivs. of 2.3-dihydro-1,4-benzodioxane) 473993-95-2 CAPLUS
1H-Indole, 3-[1-[1(25)-2,3-dihydro-7-nitro-1,4-benzodioxin-2-yl]methyl]-1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX NAME)

Absolute stereochemistry.

Page 14

L10 ANSWER 5 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN CM $\,$ 1 (Continued)

CM 2

CRN 144-62-7 CMF C2 H2 O4

0 0 || || HO-- C-- OH

473993-94-1 CAPLUS
1H-Indole, 3-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-1,2,3,6-tetrahydro-4-pyridinyl]-5-fluoro-, ethanedioate (1:1) (CA INDEX NAME)

CM 1

CRN 473993-80-5 CMF C22 H21 F N2 O2

CM 2

HO- C- C-

L10 ANSWER 5 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

Absolute stereochemistry.

473993-96-3 CAPLUS
1H-Indole, 3-[1-{[(25}-2,3-dihydro-6-mitro-1,4-benzodioxin-2-yl]methyl]1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX NAME)

473993-97-4 CAPLUS 1H-Indole, 3-[1-[(2S)-2,3-dihydro-6-nitro-1,4-benzodioxin-2-yl]methyl}-1,2,3,6-tetaphydro-4-pyridinyl]-5-fluoro- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 17 CITED REFERENCES AVAILABLE FOR

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

```
10-556,931.trn
L10 ANSWER 6 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:1002001 CAPLUS
100:314412
11TLE: Modulation of selective serotonin reuptake inhibitor and 5-HTIA antagonist activity in 8-azabicyclo[3.2.1]octane derivatives of 2,3-dihydro-1,4-benzodioxane

AUTROR(S): Gilbert Adam W. Stark Carv R. Nilskantan
                                                                           2,3-0unyuco-1,4-Denzodloxane
Gilbert, Adam M.; Stack, Gary P.; Nilakantan,
Ramaswamy; Kodah, Jason: Tran, Megan; Scerni,
Rosemary; Shi, Xiaojie; Smith, Deborah L.; Andree,
Tarrance H.
AUTHOR (S):
                                                                           Chemical and Screening Sciences, Wyeth Research.
CORPORATE SOURCE:
                                                                          River, NY, 10945, USA
Bioorganic & Medicinal Chemistry Letters (2004),
14(2), 515-518
CODEN: BMCLES; ISSN: 0960-894X
Elsevier Science B.V.
SOURCE:
 PUBLISHER:
 DOCUMENT TYPE:
LANGUAGE:
               MENT TYPE: Journal
JACE: English
R SOURCE(S): CASREACT 140:314412
2,3-Dihydro-1,4-benzodioxanes with aryl 8-aza-bicyclo[3.2.1]oct-3-ene
attachments produce compds. with potent 5-HT-T affinity, and weak 5-HTIA
affinity and ul affinity. This compares with 2,3-dihydro-1,4-
benzodioxanes containing 8-aza-bicyclo[3.2.1] octan-3-ol attachments
 OTHER SOURCE(S):
 which
               possess potent S-HTIA affinity, moderate to good selectivity over all
and little S-HT-T affinity. A 3-benzothiophene analog was synthesized
which possesses potent S-HTIA affinity and especially good selectivity
over both
               αl and 5-HT-T.
678992-73-9P
IΤ
               678992-73-9P
RE: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (modulation of selective serotonin reuptake inhibitor and 5-HTlA antagonist activity in 8-aza-bicyclo[3.2.1]octane derivs. of 2,3-dihydro-1,4-benzodioxane) 678992-73-9 CAPLUS
                2,3-dlhydro-1,4-benzodioxane)
678992-73-9 CAPLUS
8-Azabicyclo[3.2.1]oct-2-ene, 8-[[(2S)-2,3-dihydro-8-methoxy-1,4-benzodioxin-2-yl]methyl}-3-(5-fluoro-1H-indol-3-yl)- (CA INDEX NAME)
```

Absolute stereochemistry.

REFERENCE COUNT: THIS

THERE ARE 17 CITED REFERENCES AVAILABLE FOR

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L10 ANSWER 7 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2003:950068 CAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
TITLE:
                                              140:5054
                                             140:5054
Preparation of antidepressant azaheterocyclylmethyl derivatives of 1,4,5-trioxa-phenanthrene
Tran, Megan; Stack, Gary P.
Wyeth, John, and Brother Ltd., USA
U.S. Pat. Appl. Publ., 9 pp., Cont.-in-part of U.S.
Ser. No. 132,238.
CODEN: USXXCO
INVENTOR(S):
PATENT ASSIGNEE(S):
SOURCE:
DOCUMENT TYPE:
                                              Patent
English
2
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
         PATENT NO.
                                              KIND
                                                          DATE
                                                                                APPLICATION NO.
                                                                                                                          DATE
         US 2003225157
US 6906206
US 2002193401
US 6555560
                                                          20031204
20050614
20021219
                                                                                                                          20030303
                                               A1
B2
A1
                                                                                US 2003-377850
                                                                                                                          20020425
                                                                                US 2002-132238
                                                В2
                                                          20030429
         US 2005004209
US 6943178
                                                          20050106
                                                                                US 2004-881102
                                                                                                                          20040630
                                                          20050913
PRIORITY APPLN. INFO.:
                                                                                US 2001-287448P
                                                                                                                     P 20010430
                                                                                US 2002-132238
                                                                                                                     A2 20020425
                                                                                US 2003-377850
                                                                                                                     A3 20030303
```

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

The title compds. [I; R1, R3-R5, R7 = H, halo, CN, etc.; R2, R6 = H, alkyl; Z = CR7, N; X = O, S, H2, F2; n = 0-2], useful for the treatment οf

diseases such as depression (including but not limited to major depressive

MARPAT 140:5054

disorder, childhood depression and dysthymia), anxiety, panic disorder, post-traumatic stress disorder, premenstrual dysphoric disorder,

post-trainmatic stress distriction deficit disorder (with and without hyperactivity), obsessive compulsive disorder (including trichotillomania), social anxiety disorder, generalized anxiety disorder, obesity, eating disorders such as anorexis nervosa, bulimia nervosa, vasomotor flushing, cocaine and alc. addiction, sexual dysfunction and related illnesses, were prepared Novel

intermediates

If [R1, R2, X as above; Y = OH, halo, alkylsulfonate,
tifluoromethanesulfonate, (un)substituted benzenesulfonate) were also
prepared and claimed. Thus, reacting [(R2)-7-oxo-2, 3, 8, 9-tetrahydro-7H[1, 4]dioxino[2, 3-h]chromen-2-yl]methyl 4-methylbonzenesulfonate

(preparation given) with 3-(1,2,3,6-tetrahydro-4-pyridinyl)-IH-indole afforded 18% (3)-III which showed Ki of 2.74 mM in test for 5-HT transporter affinity. IT 474551-68-38 474551-71-89 474551-73-0P 474551-76-39

Page 15

OTHER SOURCE(S):

L10 ANSWER 6 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 7 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) RE: PAC (Pharmacological activity): SFN (Synthetic preparation): THU (Therapeutic uses): BIOL (Biological study): PREP (Preparation): USES

(Usea)

(prepn. of antidepressant azaheterocyclylmethyl derivs. of
1, 4,5-trioxa-phenanthrene)

RN 474551-60-3 CAPLUS

CN 7H-Pyrano[2,3-f]-1,4-benzodioxin-7-one,
2-[(4-(5-fluoro-1H-indol-3-yl)-3,6dihydro-1(2H)-pyridinyl|methyl)-2,3-dihydro-, (2S)-, (2E)-2-butenedioate
(1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 474551-67-2 CMF C25 H21 F N2 O4

Absolute stereochemistry.

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

474551-71-8 CAPLUS
1H-Indole, 5-fluoro-3-[1,2,3,6-tetrahydro-1-[[(2S)-2,3,8,9-tetrahydro-7H-pyrano[2,3-f]-1,4-benzodioxin-2-yl}methyl]-4-pyridinyl]-, ethanedioate
[1:1] (CA INDEX NAME)

L10 ANSWER 7 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN CRN 474551-70-7 CMF C25 H25 F N2 O3 (Continued)

Absolute stereochemistry.

CM 2

CRN 144-62-7 CMF C2 H2 O4

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RN 474551-73-0 CAPLUS
CN 7H-Pyrano[2,3-f]-1,4-benzodioxin-7-one,
2-[3,6-dihydro-4-(1H-indo1-3-y1)1(2H)-pyridinyl]methyl]-2,3,8,9-tetrahydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

L10 ANSWER 7 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2 CRN 144-62-7 CMF C2 H2 O4

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REFERENCE COUNT: THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 7 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 474551-76-3 CAPLUS
CN 1H-Indole,
3-[1,2,3,6-tetrahydro-1-[[(2S)-2,3,8,9-tetrahydro-7H-pyrano[2,3[]-1,-4-benzodioxin-2-yl]methyl]-4-pyridinyl]-, ethanedioate (1:1) (CA
INDEX NAME)

CM 1

CRN 474551-75-2 CMF C25 H26 N2 O3

Absolute stereochemistry.

L10 ANSWER 8 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:678510 CAPLUS
TITLE: 2003:678510 CAPLUS
TAPLUS
TITLE: 2003:678510 CAPLUS

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003162805	A1	20030828	US 2003-377901	20030303
US 6706736	B2	20040316		
US 2002183353	A1	20021205	US 2002-131340	20020424
US 6552049	B2	20030422		
PRIORITY APPLN. INFO.:			US 2001-286569P	20010426
			US 2002=131340 Z	2 20020424

OTHER SOURCE(S): MARPAT 139:214473

The title compds. [I; R1, R3-R5, R7 = H, halo, CN, etc.; Y = CO, C(R2)2 and Z = CH2, (CH2)2, CH:CH, NR2; or Y and Z, taken together, form CR2:CH, N:CR2, CR2:Nr R2, R6 = H, alkyl: X = CR7, N; n = 0-2], useful for the treatment of depression such as obsessive compulsive disorder, panic AB

ANSWER 8 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) attacks, generalized anxiety disorder, social anxiety disorder, sexual dysfunction, eating disorders, obesity, addictive disorders caused by ethanol or cocaine abuse and related illnesses, were prepd. E.g., a 5-step synthesis of (S)-II, starting from)-(7-hydroxy-2,3-dihydro-1,4-benzodioxin-2-y]bmthanol and 2,3-dichloro-1-propene, which showed Ki of 14.07 nM against 5-HTIA receptor binding, was given. 474621-95-99 474621-95-09 474621-97-1P 474621-98-2P 474621-99-3P 474621-97-1P 474621-98-2P 474621-99-3P 474622-00-9P RL: PRC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of antidepressant azaheterocyclylmethyl derive of

(Uses)
 (preparation of antidepressant azaheterocyclylmethyl derivs. of
 oxaheterocycle-fused-[1,4]-benzodioxans)
474621-95-9 CAPLUS
HH-Indole, 3-[1-[(28)-2,3-dihydro-8-methylfuro[3,2-f]-1,4-benzodioxin-2-yl|methyl]-1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX NAME)

Absolute stereochemistry.

474621-96-0 CAPLUS
1H-Indole, 3-[1,2,3,6-tetrahydro-1-[[(25)-2,3,8,9-tetrahydrofuro[3,2-f]-1,4-benzodioxin-2-y1]methyl]-4-pyridinyl]- (CA INDEX NAME)

Absolute stereochemistry.

L10 ANSWER 8 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 474621-99-3 CAPLUS
CN 1H-Indole,
5-fluoro-3-[1,2,3,6-tetrahydro-1-[[(2S)-2,3,9,10-tetrahydro-8Hpyrano[3,2-f]-1,4-benzodioxin-2-yl]methyl)-4-pyridinyl)- (CA INDEX NAME)

Absolute stereochemistry.

RN 474622-00-9 CAPLUS
CN 1H-Indole,
5-fluoro-3-[1,2,3,6-tetrahydro-1-[[(25)-2,3,9,10-tetrahydro-8H-pyrano[3,2-f]-1,4-benzodioxin-2-y]methyl]-4-pyridinyl]-,
(2E)-2-butenedioate (2:1) (CA INDEX NAME)

CM 1

CRN 474621-99-3 CMF C25 H25 F N2 O3

Page 17

L10 ANSWER 8 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474621-97-1 CAPLUS

RN 4/452-3-4 4/452 1 H-Indole, 3-[1-[([2S]-2,3-dihydrofuro[3,2-f]-1,4-benzodioxin-2-yl]methyl]-1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX NAME)

Absolute stereochemistry.

474621-98-2 CAPLUS
1H-Indole, 3-[1,2,3,6-tetrahydro-1-{[(2S)-2,3,9,10-tetrahydro-8H-pyrano[3,2-f]-1,4-benzodioxin-2-yl]methyl)-4-pyridinyl]- (CA INDEX NAME)

Absolute stereochemistry.

L10 ANSWER 8 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN Absolute stereochemistry. (Continued)

CM 2

Double bond geometry as shown.

L10 ANSWER 9 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:551188 CAPLUS
DOCUMENT NUMBER: 139:117429
Freparation of
indolyldihydropyridinylmethyltrioxasara
yclopentanaphthalenes as serotonin reuptake

inhibitors

INVENTOR(S):
PATENT ASSIGNEE(S):
SOURCE:

and 5-HTIA antagonists.
Tran, Megan; Stack, Gary P.
Wyeth, John, and Brother Ltd., USA
U.S. Pat. Appl. Publ., 12 pp., Cont.-in-part of U.S.
Ser. No. 131,987.
CODEN: USXXCO
Patent
English
2

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003134871	A1	20030717	US 2003-340424	20030110
US 6617334	B2	20030909		
US 2002183354	A1	20021205	US 2002-131987	20020425
US 6525075	B2	20030225	•	
US 2003109562	A1	20030612	US 2003-340413	20030110
US 6613913	B2	20030902		
PRIORITY APPLN. INFO.:			US 2001-287449P P	20010430
			US 2002-131987 A	2 20020425

OTHER SOURCE(S):

MARPAT 139:117429

AB A method of treating posttraumatic stress disorder, premenstrual dysphoric disorder, attention deficit disorder, obesity, eating disorders, vasomotor flushing, cocaine and alc. addiction, and sexual dysfunction, comprises providing title compds. (I; R1, R2, R3, R4, R5, R7 = H, halo, cyano,

L10 ANSWER 9 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474622-50-9 CAPLUS
[1,4]Dioxino[2,3-g]benzoxazole, 8-[[3,6-dihydro-4-(1H-indol-3-y1)-1{2H}-pyridinyl]methyl]-7,8-dihydro-2-methyl-, (88)- (CA INDEX NAME)

Absolute stereochemistry.

RN 474622-51-0 CAPLUS

(N 1H-Indole-5-carbonitrile, 3-[1-{[(s3-7,8-da)ydro-2-methyl[1,4]dioxino{2,3g|benzoxazol-8-yl]methyl]-1,2,3,6-tetrahydro-4-pyridinyl}- (CA INDEX NAME)

Absolute stereochemistry

L10 ANSWER 9 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) carboxamido, carboalkoxy, CF3, alkyl, alkoxy, alkanoyloxy, amino, monoor dialkylamino, alkanamido, alkanasulfonamido; R6 = H, alkyl; dotted

- optional double bond: Z = CR7, N; n = 0, 1, 2). Thus,
[(8R)-2-methyl-7,8-dihydro(1,4|dioxino(2,3-g][1,3]benzoxazol-8-yl]methyl
4-methylbenzeneulfonate (prepn. given) and 3-(1,2,3,6-tetrahydro-4pyridinyl)-1H-indole-5-carbonitrile were heated in DMSO at 75-80*
to give (S)-3-[1-{2-methyl-7,8-dihydro-1,6,9-trioxa-3-

to give (8)-3-11-[2-methyl-7,8-dhydro-1,6,9-trioxa-3
azacyclopenta[a]naphthalen-8-ylmethyl]-1,2,3,6-tetrahydropyridin-4-yl]-1Hindole-5-carbonitrile. The latter showed 5-HT transporter affinity and
5-HT1A receptor affinity with Ki = 1.68 nM and 9.56 nM, resp.

1474622-48-59 474622-59-69 474622-50-99
474622-51-0P 474622-52-1P 474622-53-2P
474622-51-0P 474622-55-4P 474622-56-5P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
(preparation of
indolyldihydropyridinylmethyltrioxaazacyclopentanaphthalenes
as serotonin reuptake inhibitors and 5-HT1A antagonists)

RN 474622-48-5 CAPLUS
CN [1,4]Dioxino[2,3-g]benzoxazole, 8-{[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)pyridinyl]methyl]-7,8-dihydro-, (8S)- (CA INDEX NAME)

RN 474622-49-6 CAPLUS
CN {1,4|Dioxino[2,3-g|benzoxazole,
8-{[4-(5-fluoro-ll+-indol-3-yl)-3,6-dihydro1(2H)-pyridinyl}methyl]-7,8-dihydro-2-methyl-, (8S)- (CA INDEX NAME)

Absolute stereochemistry.

L10 ANSWER 9 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 474622-52-1 CAPLUS
CN 1H-Indole-5-carbonitrile,
3[1-[[[83]-7,8-dinydro-2-methyl]1,4]dioxino[2,3g|benzoxazol-8-yl]methyl]-1,2,3,6-tetrahydro-4-pyridinyl]-,
(ZE)-2-butenedioate (1:2] (CA INDEX NAME)

CM 1

CRN 474622-51-0 CMF C25 H22 N4 O3

Absolute stereochemistry.

СМ 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

L10 ANSWER 9 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

HO2C E CO2H

474622-53-2 CAPLUS
[1,4]Dloxino[2,3-g]benzoxezole,
[4-(7-flucro-1H-indol-3-yl)-3,6-dihydro1(2H)-pyridinyl]methyl]-7,8-dihydro-2-methyl-, (8S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 474622-54-3 CAPLUS
CN [1,4]Dioxino[2,3-g]benzoxezole,
8-[[4-(6-fluoro-1H-indol-3-yl)-3,6-dihydro1(2H)-pyridinyl]methyl]-7,8-dihydro-2-methyl-, (8S)- (CA INDEX NAME)

L10 ANSWER 9 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN CMF C24 H22 C1 N3 O3 (Continued)

Absolute stereochemistry.

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

L10 ANSWER 9 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 474622-55-4 CAPLUS
CN [1,4]Dioxino[2,3-g]benzoxazole,
8-{[4-(5-chloro-ll-indol-3-yl)-3,6-dihydro1(2H)-pyridinyl]methyl]-7,8-dihydro-2-methyl-, (8S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 474622-56-5 CAPLUS
CN [1,4]Dioxino[2,3-g]benzoxazole,
8-[{4-(5-chloro-1H-indol-3-y1)-3,6-dihydro1(2H)-pyridinyl]methyl]-7,8-dihydro-2-methyl-, (8S)-, (2E)-2-butenedioate
(2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 474622-55-4

L10 ANSWER 10 OF 25 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2003:551187 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 139:117428

TITLE:

139:117428

139:117428

Preparation of indolyldihydropyridinylmethyldihydrodio xinoindoles as serotonin reuptake inhibitors and 5-HTLA antagonists.

INVENTOR(S):

Stack, Gary P.; Tran, Megan: Bravo, Byron A. Wyeth, John, and Brother Ltd., USA

U.S. Pat. Appl. Publ., 11 pp., Cont.-in-part of U.S. Ser. No. 131,339.

CODEN: USXXCO

DOCUMENT TYPE:

LANGUAGE:

Patett
LANGUAGE:

PATENT ACC. NUM. COUNT:
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003134870	A1	20030717	US 2003-339511	20030109
US 6627639	B2	20030930		
US 2002183352	A1	20021205	US 2002-131339	20020424
US 6593350	B2	20030715		
PRIORITY APPLN. INFO.:			US 2001-286575P	20010426
			US 2002-131339	2 20020424

OTHER SOURCE(S): MARPAT 139:117428

 $\ensuremath{\mathsf{AB}}$ $\ensuremath{\mathsf{A}}$ method of treating posttraumatic stress disorder, premenstrual dysphoric

disorder, attention deficit disorder, obesity, eating disorders,

notor flushing, cocaine and alc. addiction, and sexual dysfunction, comprises provision of title compds. (1; Rl. R3, R4, R5, R7 = H, halo, cyano, carboxamido, carbosalkoxy, Cf3, alkyl, alkoxy, alkanoyloxy, amino, mono-, dialkylamino, alkanamido, alkanesulfonamido: R2 = H, halo, alkyl: R6 = H

I

, alkyl; Z = CR7, N). Thus, {
{(2R)-8-methyl-2,3-dihydro-7H-{1,4}dioxino{2,3-elindol-2-yl|methyl 4-methylbenzenesulfonate (preparation given) and 3-(1,2,3,6-tetrahydro-4-pyridinyl)-1H-indole in DMSO were heated at

ANSWER 10 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) 65-67° for 4 h to give (S)-2-[(4-(1H-indol-3-y1)-3,6-dihydropyridin-1(2H)-y1] methyl]-8 methyl-2,3-dihydro-7H-(1,4)dioxino[2,3-e]indole. 474544-34-8P 474544-36-DP 474544-38-2P 474544-39-3P 474544-41-7P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(Uses)
(preparation of indolyldihydropyridinylmethyldihydrodioxinoindoles as serotonin reuptake inhibitors and 5-HTIA antagonists)
474544-34-8 CAPLUS
7H-1, 4-Dioxino[2,3-e]indole, 2-[[3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-pyridinyl)methyl]-2,3-dihydro-8-methyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

Absolute stereochemistry.

L10 ANSWER 10 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474544-41-7 CAPLUS
7H-1,4-Dioxino{2,3-e}indole, 8-ethyl-2-{{4-(5-fluoro-lH-indol-3-yl}-3,6-dihydro-1(2H)-pyridinyl]methyl}-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

L10 ANSWER 10 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474544-38-2 CAPLUS
7H-1,4-Dioxino[2,3-e]indole, 2-[[4-(5-fluoro-lH-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

474544-39-3 CAPLUS
7H-1,4-Dioxino[2,3-e]indole, 2-[{3,6-dihydro-4-(1H-indol-3-yl}-1{2H}-pyridinyl}methyl]-8-ethyl-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

LIO ANSWER 11 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
DOCUMENT NUMBER: 137:384846
Process for preparation of indolylpyridinylmethyldioxinoquinolines and related compounds
INVENTOR(S): Chan, Anita Wai-Yin; Curran, Timothy Thomas; Iera, Silvio; Chew, Warren; Sellstedt, John Hamilton; Vid, Galina; Feigelson, Gregg; Ding, Zhixian
Wyeth, John and Brother Ltd., USA
PCT Int. Appl., 59 pp.
CODEN: PIXXD2
DOCUMENT TYPE: PAMELY ACC. NUM. COUNT: PAMELY

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PA	TENT	NO.			KIN	D	DATE			APP	LICAT	ION	NO.			DATE	
WO	2002	0926	02		A2		2002	1121			2002-						
WO	2002																
	W:										, BG,						
		co,	CR,	Cυ,	CZ,	DE,	DK,	DM,	DZ,	EC	, EE,	ES,	FΙ,	GB,	GD	, GE,	GH,
		GM,	HR,	Hυ,	ID,	IL,	IN,	ıs,	JP,	KE	, KG,	KP,	KR,	ΚZ,	LC	, LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN	, MW,	MX,	MZ,	NO,	NZ	, OM,	PH,
											, SL,	TJ,	TM,	TN,	TR	, TT,	TZ,
		UA,	UG,	UZ,	VN,	YU,	ZA,	ZM,	ZW								
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD.	SL,	SZ	, TZ,	UG,	ZM,	ZW,	AT	, BE,	CH,
											, IT,						
		BF,	BJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ	, GW,	ML,	MR,	NE,	SN	TD,	TG
CA	2447	150			Al		2002	1121		CA	2002-	2447	150			20020	514
ΑU	2002	3097	69		A1		2002	1125		ΑU	2002- 2002-	3097	69			20020	514
US	2002	1879	83		A1		2002	1212		US	2002-	1453	69			20020	514
US	6693	197			В2		2004	0217			2002-						
ΕP	1387	845			A2		2004	0211		EΡ	2002-	7367	90			20020	514
	R:	AT.	BE.	CH.	DE.	DK.	ES.	FR.	GB.	GR	, іт,	T.T.	TJI.	NT.	SE	. MC.	PT.
		TD		* 10					~~								
CN	1509	290		,	A	,	2004	0630	,	CN	2002-	8100	67			20020	1514
BR	2002	0099	01		A		2004	0713		BR	2002-	9901				20020	514
JP	2004	5306	9.3		T		2004	1007		10	2002- 2002- 2002- 2003- 2003-	5894	86			20020	1514
MX	2003	PAIG	524		Ā		2005	0307		MX	2003-	PAIN	524			20031	117
US	2004	1861	23		D 1		2004	0923		115	2003-	734R	67			20031	212
US	703R	052			B2		2006	0502		0.5	2005	, , , ,	٠,				
us	2006	0742	40		D 1		2006	0406		us	2005-	2822	0.2			20051	118
US	7166	723	••		B2		2007	0123		۷.5	2005		-			20051	
US	2007	1237	0.5		14		2007	0531		119	2006-	5665	28			20061	204
TT	, pop	LN	TNFO		,,,			0001		110	2006- 2001-	2015	47D		D		
		D . • • •	21110							03	2001-	2313	7/2		•	20010	,,,,
										US	2002-	1453	69		FΑ	20020	1514
										WO	2002-	US 15	097	1	W	20020	514
										US	2003-	734B	67		А3	20031	212
										US	2005~	2622	UZ		A3	20051	TTB.

OTHER SOURCE(S):

CASREACT 137:384846; MARPAT 137:384846

L10 ANSWER 11 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

AB Title compds. [I; Rl = H, OH, halo, cyano, carboxamido, carboalkoxy, alkyl, alkanoyloxy, amino, mono- or dialkylamino, alkanamido, alkanesulfonamido; R2, R3, R4, R6 = H, OH, halo, cyano, carboxamido, carboalkoxy, CT9, alkyl, alkoxy, alkanoyloxy, amino, mono- or dialkylamino, alkanamido, alkanesulfonamido; R5 = H, alkyl; dotted line = optional double bond; A, D = CR1, N; provided that ≥ lof A and D = N; E, G = CR1; Z = N, CR6), were prepared by a 7-step process. Thus, [(2R)-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinolin-2-yl]methyl 4-methylbenzenesulfonate (preparation given),
3-11,2,3,6-tetrahydropyridin-4-yl)-H-indole (preparation given) and K2CO3 were heated in THF:DMF at 80-83 for 10 h to give 72% (2S)-2-[4-(1H-indol-3-yl)-3,6-dihydro-2H-pyridin-1-yl-mthyl)-8-methyl-2,3-dihydro-1,4-dioxino[2,3-f]quinoline.
IT 460353-65-5P
RL: MMF (Industrial manufacture); SPN (Synthetic preparation); PREP

RE: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(process for preparation of indolylpyridinylmethyldioxinoquinolines and

related compds.)
460353-65-5 CAPLUS
1,4-Dioxino[2,3-f]quinoline, 2-{[3,6-dihydro-4-(1H-indol-3-y1)-1{2H}-pyridinyl]methyl]-2,3-dihydro-8-methyl-, {2S}- (CA INDEX NAME)

Absolute stereochemistry.

ACCESSION NUMBER: DOCUMENT NUMBER: TITLE: indoletetrahydropyridine derivatives of 2,3-dihydro-7H-[1,4]dioxino{2,3delivatives of 2,3-dinguto-7n-[7,4]diolino[2,3-e]indole
Stack, Gary Paul; Tran, Megan; Bravo, Byron Abel
Wyeth, John, and Brother Ltd., USA
PCT Int. Appl., 30 pp.
CODEN: PIXXD2 INVENTOR(S): PATENT ASSIGNEE(S): SOURCE: DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: English 2 PATENT NO. KIND DATE APPLICATION NO. DATE

WO 2002088146 A2 20021107 WO 2002-US13118 20020425
WO 2002088146 A3 20030213 R, RT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, LI, NI, SP, KE, KG, KF, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MM, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SI, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW
RN: GH, GM, KE, LS, MM, MZ, SD, SI, SZ, TZ, UG, ZH, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, GB, AQ, GG, GG, MH, LM, RN, ES, NN, DT, TG
CA 2445583 A1 20021107 CA 2002-2445583 20020425
BP 1381615 B1 20040103
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FY, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, LE, SI, LT, LV, FY, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, LE, SI, LT, LV, FY, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FY, FR, GB, GR, TY, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FY, FR, GB, GR, TY, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FY, FR, GB, GR, TY, DT, CC AC AC ACCOUNTS AND ACCOUNT PATENT NO. KIND DATE APPLICATION NO. DATE

Preparation of antidepressant

L10 ANSWER 12 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2002:849647 CAPLUS DOCUMENT NUMBER: 137:353044

WO 2002-US13118 W 20020425 OTHER SOURCE(S): MARPAT 137:353044

L10 ANSWER 11 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

L10 ANSWER 12 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

The title compds. [I; R1, R3-R5, R7 = H, halo, CN, etc.; R2 = H, halo, alkyl, CF3; R6 = H, alkyl; R6 = H, alkyl; Z = CR7, N], useful in the treatment of central nervous system disorders including depression, obsessive compulsive disorder, panic attacks, generalized anxiety disorder; sexual dysfunction, eating disorders, and addictive disorders caused by ethanol or cocaine abuse, were prepared E.g., a 8-step heasis

nesia
of (S)-II, starting from 5-nitroguaiacol and allyl bromide, which showed
Ki of 3.44 nM when tested for 5-HT transporter affinity, was given.
474544-4-8-P 474544-36-OP 474544-38-2P
474544-39-3P 474544-11-7P 474544-53-1P
474544-53-3P 474544-57-5P 474544-59-7P

474544-60-0P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(Uses)
(preparation of antidepressant indoletetrahydropyridine derivs. of 2,3-dihydro-7H-[1,4]dioxino[2,3-e]indole)
474544-34-8 CAPLUS
7H-1,4-Dioxino[2,3-e]indole, 2-[[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl)-2,3-dihydro-8-methyl-, (2S)- (CA INDEX NAME)

L10 ANSWER 12 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 474544-36-0 CAPLUS
CN 7H-1,4-Dioxino[2,3-e]indole, 2-[{3,6-dihydro-4-{1H-indol-3-yl}-1(2H)-pyridinyl]methyl-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry

RN 474544-38-2 CAPLUS
CN 7H-1,4-Dioxino[2,3-e]indole, 2-[[4-(5-fluoro-1H-indol-3-y1)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

L10 ANSWER 12 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued

RN 474544-53-1 CAPLUS
CN 7H-1,4-Dioxino[2,3-è]indole, 2-[[3,6-dihydro-4-(lH-indol-3-yl)-1(2H)-pyridinyl]methyl]-2,3-dihydro-8-methyl- (CA INDEX NAME)

RN 474544-55-3 CAPLUS
CN 7H-1,4-Dioxino[2,3-e]indole, 2-[[3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-pyridinyl]methyl)-2,3-dihydro- (CA INDEX NAME)

L10 ANSWER 12 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 474544-39-3 CAPLUS CN 7H-1,4-Dioxino[2,3-e]indole, 2-[[3,6-dihydro-4-(lH-indol-3-yl)-1(2H)-pyridinyl]methyl]-8-ethyl-2,3-dihydro-, [2S}- (CA INDEX NAME)

Absolute stereochemistry.

RN 474544-41-7 CAPLUS
CN 7H-1,4-Dioxino[2,3-e]indole, 8-ethyl-2-[{4-(5-fluoro-1H-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

L10 ANSWER 12 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 474544-57-5 CAPLUS
CN 7H-1,4-Dioxino[2,3-e]indole, 2-[[4-(5-fluoro-1H-indol-3-y1)-3,6-dihydro1(2H)-pyridinyl]methyl]-2,3-dihydro(CA INDEX NAME)

RN 474544-59-7 CAPLUS
CN 7H-1,4-Dioxino[2,3-e]indole, 2-[[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl]-8-ethyl-2,3-dihydro- (CA INDEX NAME)

L10 ANSWER 12 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474544-60-0 CAPLUS 7H-1,4-Dioxino[2,3-e]indole, 8-ethyl-2-[[4-(5-fluoro-1H-indol-3-y1)-3,6-dhydro-1(ZN)-pyridinyl]methyl]-2,3-dihydro- (CA INDEX NAME)

L10 ANSWER 13 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

The title compds. [I; R1, R4-R6, R8 = H, OH, halo, etc.; R2, R3 = H, alkyl, halo, OH, CN, NN2; R7 = H, alkyl; Z = CR8, N; n = 0-2), useful for the treatment of depression and other diseases such as obsessive compulsive disorder, panic attacks, generalized anxiety disorder, sexual dysfunction, eating disorders, obesity, letive disorders, excual dysfunction, eating disorders, obesity, letive disorders caused by ethanol or cocaine abuse and related illnesses, were prepared Thus, reacting (2R)-2,3-dihydro[1,4]disorio[2,3-f]quinoxalin-2-ylmethyl 4-methylbenzenesulfonate (multi-atep synthesis given) with 5-fluoro-3-(1,2,3,6-tetrahydro-4-pyridiny)-1H-indole afforded 74% (S)-II which showed Ki of 17.72 M against 5-HTIA receptor binding. 474607-99-2P 474608-00-97-19 474608-00-99 474608-01-0P 474608-03-4P 474608-06-5-P 474608-03-4P 474608-06-5-P 474608-01-0P 474608-03-4P 474608-05-8P 474608-01-P RL: PAC (Pharmacological activity): SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological atudy); PREP (Preparation); USES (Uses)

(Uses)

(preparation of antidepressant azaheterocyclylmethyl derivs. of 2,3-dihydro-1,4-dioxino[2,3-f]quinoxaline)

RN 474607-96-0 CAPJUS

CN 1,4-Dioxino[2,3-f]quinoxaline,
2-[[4-(5-f]uoro-1H-indol-3-yl)-3,6-dihydro1(2H)-pyridinyl]methyl]-2,3-dihydro-, (23)- (CA INDEX NAME)

L10 ANSWER 13 OF 25
ACCESSION NUMBER:
DOCUMENT NUMBER:
137:35305
TITLE:
INVENTOR(S):
PATENT ASSIGNEE(S):
SOURCE:
DOCUMENT TYPE:
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
FAMILY ACC. NUM. COUNT:
PATENT PATENT SUPPREMARKS
PATENT ASSIGNEE(S):
PATENT TYPE:
DOCUMENT TYPE:
PATENT INFORMATION:

CAPPUS COPYRIGHT 2007 ACS on STN
2002:849645 CAPLUS
Preparation of antidepressant azaheterocyclylmethyl derivatives of 2,3-dihydro-1,4-dioxino[2,3-f]quinoxiline
Gross, Jonathan Laird; Stack, Gary Paul
Wyeth, John, and Brother Ltd., USA
PCT Int. Appl., 33 pp.
COODEN: PIXXD2
Patent InfoRMATION:
English
2
PATENT INFORMATION:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PAT	TENT :	NO.			KIN	D					LICAT						
WO	2002	0881	44		A2		2002	1107	1	WO 2	2002-	US 12	859		2	0020	423
WO	2002																
	W:										, BG,						
											, EE,						
											, KG,						
											, MW,						
										SK,	, SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,
							ZA,										
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	, TZ,	UG,	ZM,	ZW,	ΑT,	BE,	CH,
		CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	, IT,	LU,	MC,	NL,	PΤ,	SE,	TR,
											, G₩,						
CA	2445	581			A1		2002	1107		CA 2	2002-	2445	581		2	0020	423
											2002-						
EP	1381	614			A2		2004	0121		EP 2	2002-	7257	87		2	0020	423
EP	1381	614			В1		2006	0802									
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	, IT,	LI,	LU,	NL,	SE,	MC,	PT,
											, TR						
CN	1503	801			A		2004	0609		CN 2	2002- 2002-	8086	79		2	0020	423
BR	2002	0093	42		A		2004	0615		BR 2	2002-	9342			2	0020	423
JP	2004	5275	63		т		2004	0909		JP 2	2002 - 2002 - 2002 -	5854	42		2	0020	423
AT	3349	89			T		2006	0815		AT 2	2002-	7257	87		2	0020	423
ES	2269	678			т3		2007	0401		ES 2	2002-	2725	787		2	0020	423
MX	2003	PA09	826		А		2005	0307	- 1	MX 2	2003-	PA98:	26		2	0031	024
PRIORITY	APP	LN.	INFO	. :					,	US 2	2001-	2864	38P	1	P 2	0010	426
									. 1	wo :	2002-	US12	859	1	A 2	0020	423

OTHER SOURCE(S):

MARPAT 137:353067

L10 ANSWER 13 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

1,4-Dioxino[2,3-f]quinoxaline, 2-[[3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-pyridinyl]methyl]-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

474607-98-2 CAPLUS
1,4-Dioxino[2,3-f]quinoxaline, 2-[[3,6-dihydro-4-(1H-indol-3-yl)-1{2H}-pyridinyl|methyl]-2,3-dihydro-8,9-dimethyl-, (2S)- (CA INDEX NAME)

L10 ANSWER 13 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

RN 474607-99-3 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoxaline,
2-[[4-(5-f]uoco-lH-indol-3-yl)-3,6-dihydro1(2H)-pyridinyl]methyl]-2,3-dihydro-8,9-dimethyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

474608-00-9 CAPLUS

474608-00-9 CAPLUS 1.4-Dioxnol(2,3-f[quinoxaline, 2-[{3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl)methyl}-8,9-diethyl-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

L10 ANSWER 13 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474608-06-5 CAPLUS
1,4-Dioxino(2,3-f]quinoxaline, 2-[[3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-pyridinyl]methyl]-2,3-dihydro- (CA INDEX NAME)

474608-07-6 CAPLUS
1,4-Dioxino[2,3-f]quinoxaline, 2-[{3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl}-2,3-dihydro-8,9-dimethyl- (CA INDEX NAME)

L10 ANSWER 13 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)

RN 474608-01-0 CAPLUS
CN 1,4-Dioxino1(2,3-f)quinoxaline,
8,9-diethyl-2-[[4-(5-fluoro-lH-indol-3-yl)3,6-dihydro-1(2H)-pyridinyl)methyl]-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 474608-05-4 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoxaline,
2-[[4-(5-f]louro-1H-indol-3-yl)-3,6-dihydro1(2H)-pyridinyl]methyl]-2,3-dihydro(CA INDEX NAME)

L10 ANSWER 13 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 474608-08-7 CAPLUS
CN 1.4-Dioxino[2,3-f]quinoxaline,
2-[{4-(5-fluoro-lH-indol-3-yl)-3,6-dihydro1(2H)-pyridinyl]methyl]-2,3-dihydro-8,9-dimethyl- (CA INDEX NAME)

474608-09-8 CAPLUS
1,4-Dioxino[2,3-f]quinoxaline, 2-[[3,6-dihydro-4-(1H-indol-3-yl)-1{2H}-pyridinyl]methyl]-8,9-diethyl-2,3-dihydro- (CA INDEX NAME)

Page 24

L10 ANSWER 13 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 474608-10-1 CAPLUS CN 1,4-Dioxino[2,3-f]quinoxaline, 8,9-diethyl-2-[[4-(5-fluoro-lH-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl)methyl]-2,3-dihydro- (CA INDEX NAME)

ANSWER 14 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) induced psychoses and dyskinesias, Tourette's syndrome and hyperprolactinemia and in the treatment of drug addiction such as the addiction to ethanol, nicotine or cocaine and related illnesses, were prepd. Thus, hydrogenation of (88)-8-(azidomethyl)-7.8- dihydro[1,4]dioxino[2,3-q][1,3]benzoxazol-2(3H)-one (multi-step synthesis given) afforded 68% (S)-1.HCl [R] = H; Z = NH2] which showed IC50 of 3.7 nM against D2 receptor binding. 474391-26-9P 474391-38-3P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(Uses)
(preparation of antipsychotic aminomethyl derivs. of 7,8-dihydro-3H-1,6,9trioxa-3-aza-cyclopenta(a)naphthalen-2-one)
RN 474391-26-9 CAPLUS
CN [1,4]Dioxino[2,3-g]benzoxazol-2(3H)-one, 8-[3,6-dihydro-4-(1H-indol-3-y1)1(2H)-pyridinyl]methyl]-7,8-dihydro-, (8S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 474391-38-3 CAPLUS
(1,4|Dioxino[2,3-q]benzoxazol-2[3H}-one,
8-[[3,6-dhydro-4-(1H-indol-3-y1)1(2H)-pyridinyl)methyl]-7,8-dihydro- (CA INDEX NAME)

L10 ANSWER 14 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:849644 CAPLUS
DOCUMENT NUMBER: 137:353042
Preparation of antipsychotic aminomethyl derivatives of 7, B-dihydro-3H-1, 6, 9-trioxa-3-aza-cyclopents[a]naphthalen-2-one
Stack, Gary Paul: Tran, Megan
PATENT ASSIGNEE(S): Stack, Gary Paul: Tran, Megan
Myeth, John, and Brother Ltd., USA
PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PAT	ENT I	10.			KIN	D	DATE			APPI	LICAT	ION	NO.		D	ATE	
						_									-		
WO	20020	0881	42		A1		2002	1107		WO 2	2002~	US13	419		2	0020	426
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB.	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	ΗU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	ΜA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,
		UA,	UG,	UZ,	VN,	YU,	ZA,	ZM,	2W								
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	υG,	ZM,	ZW,	AT,	BE,	CH,
		CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,
		BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ.	GW,	ML,	MR,	NE,	SN,	TD,	TG
US	2003	0736	97		A1		2003	0417		US 2	2002-	1339	94		2	0020	425
US	6800	548			B2		2004	1005									
AU	2002	2590	54		A1		2002	1111		AU 2	2002-	2590	54		2	0020	426
PRIORITY	APP	LN.	INFO	. :						US 2	2001-	2865	65P		P 2	0010	426

WO 2002-US13419

W 20020426

OTHER SOURCE(S): MARPAT 137:353042

The title compds. [I: Rl = H, halo, CN, etc.: $Z = \{un\}$ substituted piperazino, piperidino, 3,6-dihydro-2H-pyridin-1-yl, etc.], useful for treatment of disorders of the dopaminergic system, such as schizophrenia, schizoaffective disorder, bipolar disorder, Parkinson's disease, L-DOPA

L10 ANSWER 14 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

REFERENCE COUNT:

FORMAT

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

L10 ANSWER 15 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
DOCUMENT NUMBER:
137:353040
Preparation of antidepressant azaheterocyclylmethyl
derivatives of 7,8-dihydro-1,6,9-trioxa-3-azacyclopenta[a]naphthalene
Tran, Megan; Stack, Gary Paul
Wyeth, John, and Brother Ltd., USA
PCT Int. Appl., 37 pp.
CODEN: PIXXD2
DOCUMENT TYPE:
Patent

Patent English 2

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	TENT															D	ATE	
	2002												US13			2	0020	425
	W:	AE.	AG.	AL.	AM.	AT.	ΑU,	AZ.	BA.	BE	3. E	ß.	BR.	BY.	BZ.	CA.	CH.	CN.
							DK,											
							IN,											
							MD.											
							SE,											
							ZA,					,		,	• • • •	,	,	,
	RW:						MZ,			SZ	1, 1	rz.	UG,	ZM,	ZW,	AT.	BE,	CH,
		CY.	DE.	DK.	ES.	FI.	FR,	GB,	GR.	IE	. 1	т.	LU,	MC,	NL.	PT.	SE.	TR.
							CM,											
CA	2445																	
AU	2002	3075	69		A1		2002	1111		ΑU	200	2-	3075	69		2	0020	425
EP	1392	700			A1		2004	0303		ΕP	200	2-	7668	16		2	0020	425
EP	1392	700			B1		2004	0929										
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GF	ŧ, 1	т,	LI,	LU,	NL,	SE,	MC,	PT,
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AI	., 1	rR						
	1503				А		2004										0020	425
BR	2002	0094	07		А		2004	0706		BR	200	2-26	9407			2	0020	
JP	2004 2779	5283	52		т		2004	0916		JΡ	200)2-	5854	38		2	0020	425
AT	2779	34			т		2004	1015		ΑТ	200	2-	7668	16		2	0020	425
PT	1392 2225	700			Ť		2004	1231		PT	200)2-	7668	16		2	0020	425
ES	2225	798			Т3		2005	0316		ES	200	02-	2766	816		2	0020	425
MIX	2003	PA09	829		A		2005	0307		MX	200	3-	PA98	29		2	0031	024
PRIORIT	Y APP	LN.	INFO	. :									2874				0010	430
										WO	200)2-	US 13	117		₩ 2	0020	425

MARPAT 137:353040

OTHER SOURCE(S):

L10 ANSWER 15 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

474622-49-6 CAPLUS
[1,4]Dioxino[2,3-g]benzoxazole,
4-(5-fluoro-lH-indol-3-yl)-3,6-dihydro1(2H)-pyridinyl]methyl]-7,8-dihydro-2-methyl-, (8S)- (CA INDEX NAME)

474622-50-9 CAPLUS
[1,4]Dioxino[2,3-g]benzoxezole, 8-[[3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-pyridinyl]methyl]-7,8-dihydro-2-methyl-, (8S)- (CA INDEX NAME)

Absolute stereochemistry.

L10 ANSWER 15 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

The title compds. [I; R1-R5, R7 = H, halo, CN, etc.; R6 = H, alkyl; Z = CR7, N; n = 0-2], useful for the treatment of depression and other diseases such as obsessive compulsive disorder, panic attacks, AB

ralized anxiety disorder, social anxiety disorder, sexual dysfunction, eating disorders, obesity, addictive disorders caused by ethanol or cocaine

and related illnesses, were prepared E.g., a multi-step synthesis of (S)-II, starting from 5-nitroguatacol and allyl bromide, which showed Ki of 4.00 nM in test on 5-HT transporter affinity, was given.

474622-68-59 474622-69-69 474622-50-19 474622-69-19 474622-51-90 474622-51-90 474622-55-49 474622-55-49 474622-55-49 474622-55-49 474622-55-49 474622-55-49 474622-55-49 474622-61-29 474622-63-49 474622-61-29 474622-68-19 47462-88-19 474622-88-19 474622-88-19 474622-88-19 474622-88-19 47462-88-19 474622-88-19 474622-88-19 474622-88-19 474622-88-19 47462-88-19 474622-88-19 474622-88-19 474622-88-19 474622-88-19 47462-88-19 474622-88-19 474622-88-19 474622-88-19 474622-88-19 47462-88-19 474622-88-19 474622-88-19 474622-88-19 474622-88-19 47462-88-19 474622-88-19 474622-88-19 474622-88-19 474622-88-19 474628-88-19 474628-88-19 474628-88-19 474628-88-19 474628-88-19 474628-88-19 474628-88-19 474628-88-19 474628-88-19 474628-88-19 474628-88-19 474628-88-19 474628-88-19 474628-88-19 474628-88-19 474

RI: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(Uses)
 (preparation of antidepressant azaheterocyclylmethyl derivs. of
 7,8-dihydro-1,6,9-trioxa-3-aza-cyclopenta[a]naphthalene)
474622-48-5 CAPLUS
[1,4]Dioxino[2,3-q]benzoxazole, 8-{(3,6-dihydro-4-{1H-indol-3-yl})-1(2H)-pyridinyl|methyl}-7,8-dihydro-, {8S}- (CA INDEX NAME)

Absolute stereochemistry.

L10 ANSWER 15 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474622-51-0 CAPLUS
1H-Indole-5-carbonitrile,
[((88)-7,8-dihydro-2-methyl[1,4]dioxino[2,3g]benzoxazol-8-yl]methyl]-1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 474622-52-1 CAPLUS
CN 1H-Indole-5-carbonitrile,
3-[1-[(183)-7,8-dihydro-2-methyl[1,4]dioxino[2,3g|benzoxazol-8-yl]methyl]-1,2,3,6-tetrahydro-4-pyridinyl]-,
(2E)-2-butenedioate (1:2) (CA INDEX NAME)

CM 1

CRN 474622-51-0 CMF C25 H22 N4 O3

L10 ANSWER 15 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 474622-53-2 CAPLUS
CN [1,4]Dioxino[2,3-g]benzoxazole,
8-{[4-(7-fluoro-lH-indol-3-yl)-3,6-dihydro1(2H)-pyridinyl)methyl)-7,8-dihydro-2-methyl-, (8S)- (CA INDEX NAME)

Absolute stereochemistry.

L10 ANSWER 15 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 474622-56-5 CAPLUS
CN [1,4|Dloxino[2,3-g]benzoxazole,
8-[{4-(5-chloro-lH-indol-3-yl)-3,6-dihydro1(2H)-pyridinyl]methyl]-7,8-dihydro-2-methyl-, (8S}-, (2E)-2-butenedicate
{2:1} (9CI) (CA INDEX NAME)

CM 1

CRN 474622-55-4 CMF C24 H22 C1 N3 O3

Absolute stereochemistry.

CM 2

Double bond geometry as shown.

L10 ANSWER 15 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 474622-54-3 CAPLUS
CN {1,4|Dioxino(2,3-g|benzoxazole, '
8-{{4-(6-fluoro-Hi-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl)methyl}-7,8-dihydro-2-methyl-, (8S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 474622-55-4 CAPLUS CN [1,4]Dioxino[2,3-g]benzoxazole, 8-[[4-[5-chloro-11-indo]-3-yl)-3,6-dihydro-1(2H)-pyridinyl]methyl]-7,8-dihydro-2-methyl-, (8S)- (CA INDEX NAME)

Absolute stereochemistry.

L10 ANSWER 15 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

HO2C E CO2H

474622-59-8 CAPLUS
[1,4]Dioxino[2,3-g]benzoxazole, 8-[{3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-pyridinyl]methyl]-7,8-dihydro- (CA INDEX NAME)

RN 474622-60-1 CAPLUS
CN [1,4]Dioxino[2,3-q]benzoxazole,
8-[[4-(5-fluoro-lH-indol-3-yl)-3,6-dihydro1(2H)-pyridinyl]methyl]-7,8-dihydro-2-methyl- (CA INDEX NAME)

 $\begin{array}{lll} 474622-61-2 & CAPLUS \\ \{1,4\} Dioxino\{2,3-g\} benzoxazole, & 8-\{\{3,6-dihydro-4-\{1H-indo1-3-y1\}-1\{2H\}-pyridinyl\}methyl\}-7, \\ 8-dihydro-2-methyl- & (CA INDEX NAME) \end{array}$

L10 ANSWER 15 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474622-62-3 CAPLUS 1H-Indole-5-carbonitrile, 3-{1-{(7,8-dihydro-2-methyl[1,4}dioxino[2,3-g]benzoxazol-8-yl)methyl]-1,2,3,6-tetrahydro-4-pyridinyl}- (CA INDEX NAME)

RN 474622-63-4 CAPLUS
CN [1,4]Dioxino{2,3-g|benzoxazole,
8-[[4-(7-fluoro-1H-indol-3-y1)-3,6-dihydro1(2H)-pyridinyl]methyl]-7,8-dihydro-2-methyl- (CA INDEX NAME)

L10 ANSWER 15 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

REFERENCE COUNT: THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 15 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 474622-64-5 CAPLUS CN [1,4]Dioxino[2,3-g]benzoxazole, 8-[{4-(6-fluoro-1H-indol-3-y1)-3,6-dihydro-1(2H)-pyridinyl]methyl]-7,8-dihydro-2-methyl- (CA INDEX NAME)

RN 474622-65-6 CAPLUS
CN [1,4|Dioxino(2,3-q)benzoxazole,
8-[4-(5-chloro-11-indol-3-y1)-3,6-dihydro1(2H)-pyridinyl]mathyl]-7,8-dihydro-2-methyl- (CA INDEX NAME)

L10 ANSWER 16 OF 25 CAPLUS COPYRIGHT 2007 ACS ON STN
ACCESSION NUMBER:
DOCUMENT NUMBER:
137:353039
Preparation of antidepressant ezaheterocyclylmethyl derivatives of 1,4,5-trioxa-phenanthrene
Tran, Megan; Stack, Gary Paul
Wyeth, John, and Brother Ltd., USA
PCT Int. Appl., 27 pp.
CODEM: PIXXD2
DOCUMENT TYPE:
LANGUAGE:
LANGUAGE:
PAPLIV ACC. NUM. COUNT:
PATENT INFORMATION:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PAT	TENT	NO.			KIN	D	DATE			APP	LICAT	ION	NO.		D.	ATE	
						-									-		
WO	2002	0881	36		A2		2002	1107		WO	2002-	US13	447		2	0020	429
WO	2002	0881	36		A3		2003	0320									
	W:	AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB	, BG,	BR,	BY.	BZ,	CA,	CH,	CN,
		co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC	, EE,	ES.	FI.	GB,	GD,	GE,	GH.
		GM,	HR,	HU,	ID.	IL,	IN,	15,	JP,	KE	. KG.	KP.	KR.	KZ.	LC.	LK.	LR.
		LS,	LT.	LU.	LV.	MA,	MD,	MG,	MK.	MN	MW.	MX.	MZ.	NO.	NZ.	OM,	PH.
		PL,	PT.	RO,	RU,	SD,	SE,	SG.	SI.	sĸ	. SL.	TJ.	TM.	TN.	TR.	TT.	TZ.
		UA.	UG.	UZ.	VN.	YU.	ZA.	ZM.	ZW								
	RW:									SZ	, TZ,	UG.	ZM.	ZW.	AT.	BE.	CH.
											, IT.						
											. GW						
TW	5893		,				2004				2002-					0020	
AU	2002	3035	29		A1		2002	1111		AU	2002-	3035	29		2	0020	429
PRIORITY					• • •						2001-						
										WO	2002-	US13	447		₩ 2	0020	429

OTHER SOURCE(S): MARPAT 137:353039

L10 ANSWER 16 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

AВ The title compds. [I; R1, R3-R5, R7 = H, halo, CN, etc.; R2, R6 = H, alkyl; Z = CR7, N; X = O, S, H2, F2; n = O-2], useful for the treatment of

11

diseases such as depression (including but not limited to major

diseases such as depression (including but not limited, disorder, depressive disorder, childhood depression and dysthymia), anxiety, panic disorder, post-traumatic stress disorder, premenstrual dysphoric disorder attention deficit disorder (with and without hyperactivity), obsessive compulsive disorder (including trichotillomania), social anxiety disorder, generalized anxiety disorder, obesity, eating disorders such as anorexia nervosa, bulimia nervosa, vasomotor flushing, cocaine and alc. addiction, sexual dysfunction and related illnesses, were prepared E.g., a

sexual dysfunction and related illnesses, were prepared E.g., a multi-step synthesis of (S)-II, starting from 2',3',4'-trihydroxyacetophenone and (R)-qlycidyl tosylate, which showed Ki of 2.74 nM in test for 5-HT transporter affinity, was given.

IT 474551-68-3P 474551-71-8P 474551-73-0P 474551-73-2P 474551-92-3P 474551-92-8P 474551-91-2P (Preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of antidepressant azaheterocyclylmethyl derivs. of 1,4,5-trioxa-phenanthrene)

RN 474551-68-3 CAPLUS

CN 7H-Pyrano[2,3-[]-1,4-benzodioxin-7-one, 2-[[4-(5-fluoro-1H-indol-3-yl)-3,6-dihydro-, (2S)-, (2E)-2-butenedioate

L10 ANSWER 16 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

CRN 144-62-7 CMF C2 H2 O4

но- c- c- он

RN 474551-73-0 CAPLUS
CN 7H-Pyrano{2,3-f]-1,4-benzodioxin-7-one,
2-{(3,6-dihydro-4-(1H-indol-3-yl)1(2H)-pyridinyl]methyl]-2,3,8,9-tetrahydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

Page 29

L10 ANSWER 16 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (1:1) (9CI) (CA INDEX NAME) (Continued)

CM 1

CRN 474551-67-2 CMF C25 H21 F N2 O4

Absolute stereochemistry.

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

474551-71-8 CAPLUS
1H-Indole, 5-fluoro-3-[1,2,3,6-tetrahydro-1-[[{2S}]-2,3,8,9-tetrahydro-7Hpyrano[2,3-f]-1,4-benzodioxin-2-yl]methyl]-4-pyridinyl]-, ethanedioate
(1:1) (CA INDEX NAME)

CRN 474551-70-7 CMF C25 H25 F N2 O3

Absolute stereochemistry.

L10 ANSWER 16 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474551-76-3 CAPLUS

NN 1H-Indole,
3-[1,2,3,6-tetrahydro-1-[{(2S)-2,3,8,9-tetrahydro-7H-pyrano[2,3[]-1,4-benzodioxin-2-yl]methyl]-4-pyridinyl]-, ethanedioate (1:1) (CA
INDEX NAME)

CM 1

CRN 474551-75-2 CMF C25 H26 N2 O3

Absolute stereochemistry.

CM 2

CRN 144-62-7 CMF C2 H2 O4

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RN 474551-89-8 CAPLUS
CN 7H-Pyrano[2,3-f]-1,4-benzodioxin-7-one,
2-[[4-(5-fluoro-1H-indol-3-y1]-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro- (CA INDEX NAME)

L10 ANSWER 16 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

474551-91-2 CAPLUS
1H-Indole, 5-fluoro-3-[1,2,3,6-tetrahydro-1-[(2,3,8,9-tetrahydro-7Hpyrano[2,3-f]-1,4-benzodioxin-2-yl)methyl)-4-pyridinyl]- (CA INDEX NAME)

RN 474551-92-3 CAPLUS
CN 7H-Pyrano[2, 3-f]-1, 4-benzodioxin-7-one,
2-{[3,6-dihydro-4-(1H-indol-3-y1)1(2H)-pyridinyl|methyl]-2, 3, 8, 9-tetrahydro- (CA INDEX NAME)

L10 ANSWER 16 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

474551-97-8 CAPLUS lH-Indole, 3-[1,2,3,6-tetrahydro-1-[(2,3,8,9-tetrahydro-7H-pyrano[2,3-f]-1,4-benzodioxin-2-yl)methyl]-4-pyridinyl]- (CA INDEX NAME)

L10 ANSWER 17 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:849638 CAPLUS
TITLE: 137:353038
TITLE: Preparation of antidepressant azaheterocyclylmethyl derivatives of oxaheterocycle-fused-[1,4]-benzodioxans
INVENTOR(S): Stack, Gary Paul; Gao, Hong; Gildersleeve, Elizabeth Suzanne
PATENT ASSIGNEE(S): Weth, John, and Brother Ltd., USA
POCUMENT TYPE: PATENT INFORMATION: PATENT INFORMATION: English
FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PA	TENT	NO.			KINI	D	DATE				LICAT					ATE	
											2002~					0020	424
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		co,	CR,	cu,	cz,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,
		PL,	PT,	RO,	RŲ,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,
		UΑ,	UG,	UZ,	VN,	YU,	ZA,	ZM,	ZW								
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ	TZ,	UG,	ZM,	ZW,	AT,	BE,	CH,
		CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,
											. G₩,						
CA	2445	543			Al		2002	1107		CA 2	2002-	2445	543		2	0020	424
											2002~						
EP	1381	613			Al		2004	0121		EP 2	2002-	7289	47		2	0020	424
EP	1381																
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
											TR						
	1503										2002-						
BR	2002	0093	43		A		2004	0615		BR 2	2002-	9343			2	0020	424
	2794				T						2002-					0020	
	2004										2002-						
	2229										2002-						
					А		2005	0307			2003-					0031	
RIORIT	Y APP	LN.	INFO	. :						US 2	2001-	2865	69P		P 2	0010	426

WO 2002-US12831

OTHER SOURCE(S): MARPAT 137:353038 L10 ANSWER 17 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

The title compds. [I; R1, R3-R5, R7 = H, halo, CN, etc.; Y = CO, C(R2)2 and Z = CH2, (CH2)2, CH:CH, NR2; or Y and Z, taken together, form CR2:CH, N:CR2, CR2:N; R2, R6 = H, alky!; X = CR7, N; n = 0-2], useful for the treatment of depression such as obsessive compulsive disorder, panic attacks, generalized anxiety disorder, social anxiety disorder, sexual dysfunction, eating disorders, obesity, addictive disorders caused by ethanol or cocaine abuse and related illnesses, were prepared E.g., a 5-step synthesis of (51-II, starting from -(7-hydroxy-2,3-dihydro-1,4-benzodioxin-2-yl)methanol and 2,3-dichloro-1-propene, which showed Ki of 14.07 nM against 5-HTIA receptor binding, was given. 474621-95-99 474621-96-09 474621-97-19 474621-97-19 474621-56-07 474622-15-69 474622-15-69 474622-15-69 474622-15-69 474622-15-69 474622-15-69 474622-15-69 474622-10-99
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

11

(Uses)
(preparation of antidepressant azaheterocyclylmethyl derivs. of oxaheterocycle-fused-[1,4]-benzodioxans)
474621-95-9 CAPLUS
HH-Indole, 3-[1-[[(28)-2,3-dihydro-8-methylfuro[3,2-f]-1,4-benzodioxin-2-yl]methyl)-1,2,3,6-tetrahydro-4-pyridinyl)- (CA INDEX NAME)

L10 ANSWER 17 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

 $\begin{array}{lll} 474621-96-0 & CAPLUS \\ 1H-Indole, & 3-\{1,2,3,6-tetrahydro-1-\{\{(2S)-2,3,8,9-tetrahydrofuro\{3,2-f\}-1,4-benzodioxin-2-y1\}methyl\}-4-pyridinyl\}- & (CA INDEX NAME) \\ \end{array}$

Absolute stereochemistry.

RN 474621-97-1 CAPLUS
CN 1H-Indole,
3-[1-{\([28] - 2,3-\) dihydrofuro\([3,2-f\) - 1,4-\) benzodioxin-2-yl\)methyl\[-1,2,3,6-\)tetrahydro-4-pyridinyl\[-1,2,3,6-\)tetrahydro-4-pyridinyl\[-1,2,3,6-\]

Absolute stereochemistry.

L10 ANSWER 17 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 474622-00-9 CAPLUS CN IH-Indole, 5-fluoro-3-[1,2,3,6-tetrahydro-1-[[(2S)-2,3,9,10-tetrahydro-8H-pyrano[3,2-f]-1,4-benzodioxin-2-yl]methyl]-4-pyridinyl]-, (ZE)-2-butenedioate (2:1) (CA INDEX NAME)

CM 1

CRN 474621-99-3 CMF C25 H25 F N2 O3

Absolute stereochemistry.

Page 31

L10 ANSWER 17 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

474621-98-2 CAPLUS
1H-Indole, 3-[1,2,3,6-tetrahydro-1-[{(2S)-2,3,9,10-tetrahydro-8H-pyrano[3,2-f]-1,4-benzodioxin-2-y1]methyl]-4-pyridinyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 474621-99-3 CAPLUS
CN 1H-Indole,
5-fluoro-3-(1,2,3,6-tetrahydro-1-[[(2S)-2,3,9,10-tetrahydro-8Hpyrano[3,2-f]-1,4-benzodioxin-2-yl]methyl]-4-pyridinyl]- (CA INDEX NAME)

Absolute stereochemistry.

L10 ANSWER 17 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

Double bond geometry as shown.

474622-14-5 CAPLUS IN-Indole, 3-[-[-[-2, 3-dihydro-8-methylfuro[3, 2-f]-1, 4-benzodioxin-2-yllmethyl]-1, 2, 3, 6-tetrahydro-4-pyridinyl]- (CA INDEX NAME)

474622-15-6 CAPLUS
1H-Indole, 3-{1,2,3,6-tetrahydro-1-{{2,3,8,9-tetrahydrofuro{3,2-f}-1,4-benzodioxin-2-y1)methyl}-4-pyridinyl}- (CA INDEX NAME)

474622-16-7 CAPLUS
1H-Indole, 3-[1-[(2,3-dihydrofuro[3,2-f]-1,4-benzodioxin-2-y1)methyl]1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX NAME)

L10 ANSWER 17 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474622-17-8 CAPLUS

CN 1H-Indole, 3-[1,2,3,6-tetrahydro-1-[(2,3,9,10-tetrahydro-8H-pyrano[3,2-f]-1,4-benzodioxin-2-yl)methyl]-4-pyridinyl]- (CA INDEX NAME)

474622-18-9 CAPLUS
1H-Indole, 5-fluoro-3-[1,2,3,6-tetrahydro-1-[(2,3,9,10-tetrahydro-8H-pyrano[3,2-f]-1,4-benzodioxin-2-yl)methyl]-4-pyridinyl]- (CA INDEX NAME)

L10 ANSWER 18 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:849636 CAPLUS
DOCUMENT NUMBER: 137:353036
Freepretion of antipsychotic aminomethyl derivatives of 7,8-dihydro-3H-6,9-dioxa-2,3-diaza-cyclopenta[a]naphthalene
Stack, Gary Paul; Tran, Megan
PATENT ASSIGNEE(S): Stack, Gary Paul; Tran, Megan
PATENT TYPE: PAUL; Tran, Megan
Wyeth, John, and Brother Ltd., USA
POT Int. Appl., 38 pp.
CODEN: PIXXD2
PATENT INFORMATION:
English
1
PATENT INFORMATION:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

APPLICATION NO. PATENT NO. DATE DATE WO 2002088133

W: AE, AG, AL,
CO, CR, CU,
GM, HR, HU,
LS, LT, LU,
PL, PT, RO,
UA, UG, UZ,
RW: GH, GM, VZ,
CY, DE, DK,
US 200218331
US 6800641
AU 2002308491
PRIORITY APPLN. INFO.: AU 2002-308491 US 2001-286568P 20020426 P 20010426 WO 2002-US13284 W 20020426

OTHER SOURCE(S): MARPAT 137:353036

AB The title compds. [I; Rl = H, halo, CN, etc.; R2 = H, OH, halo, etc.; Z = (un) substituted piperarino, piperidino, etc.], useful for treatment of disorders of the depaninergic system, such as schizophrenia, schizoffective disorder, bipolar disorder, Parkinson's disease, L-DOPA induced psychoses and dyxkinesias. Tourette's syndrome and hyperpolactinemia and the treatment of drug addiction such as the addiction to ethanol nicotine or cocsine and related illnesses, were prepared Thus, reacting property of the definition of the d

L10 ANSWER 17 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L10 ANSWER 18 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) ANSMER 18 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
ylmethyl 4-methylbenzenesulfonate (multi-step prepn. given) with PhCH2NH2
in DMSO afforded 841 (S)-1 [R1, R2 = H; Z = NHCH2Ph] which showed IC50 of
0.45 nM against D2 receptor binding.
474383-10-3P 474383-12-5P 474383-13-6P
474383-14-7P 474383-23-8P 474383-24-9P
RE: PAC (Pharmacological activity): SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(Uses)
(preparation of antipsychotic aminomethyl derivs. of
7,8-dihydro-3H-6,9dioxa-2,3-diaza-cyclopenta[a]naphthalene)
RN 474383-10-3 CAPLUS
CN 7H-1,4-Dioxino[2,3-e]indazole, 2-{[3,6-dihydro-4-(lH-indol-3-yl)-1{2H}-pyridinyl]methyl]-2,3-dihydro-, (25)- (CA INDEX NAME)

Absolute stereochemistry.

474383-12-5 CAPLUS
7H-1,4-Dioxino[2,3-e]indazole, 2-[[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl)-2,3-dihydro-, monohydrochloride, (2S)- (9CI) (CA INDEX NAME)

L10 ANSWER 18 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

• HCl

474383-13-6 CAPLUS
7H-1,4-Dioxino[2,3-e]indezole, 2-{[4-[(5-fluoro-1H-indol-3-yl)methyl]-1-piperidinyl]methyl]-2,3-dihydro-, {2S}- {CA INDEX NAME}

Absolute stereochemistry.

474383-14-7 CAPLUS
7H-1,4-Dioxino[2,3-e]indazole, 2-[[4-[(5-fluoro-lH-indol-3-y1)methy1]-1-piperidinyl]methy1]-2,3-dihydro-, (2S)-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 474383-13-6

L10 ANSWER 18 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

474383-24-9 CAPLUS
7H-1,4-Dioxino[2,3-e]indazole, 2-[[4-[(5-fluoro-lH-indol-3-yl)methyl]-1-piperidinyl]methyl]-2,3-dihydro- (CA INDEX NAME)

REFERENCE COUNT:

FORMAT

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

. .

L10 ANSWER 18 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN CMF C24 H25 F N4 O2 (Continued)

Absolute stereochemistry.

СМ

CRN 144-62-7 CMF C2 H2 O4

но- с- с- он

474383-23-8 CAPLUS
7H-1,4-Dioxino[2,3-e]indazole, 2-[[3,6-dihydro-4-(1H-indol-3-yl)-1[2H)-pyridinyl]methyl]-2,3-dihydro- (CA INDEX NAME)

L10 ANSWER 19 OF 25
ACCESSION NUMBER:
DOCUMENT NUMBER:
137:353034
Preparation of antidepressant (SSRI)
azaheterocyclymethyl derivatives of
7,8-dihydro-3H-6,9-dioxa-1,2diazacyclopenta[a]naphthalene
Stack, Gary Paul
Wyeth, John, and Brother Ltd., USA
PCT Int. Appl., 39 pp.
CODEN: PIXMD2
DOCUMENT TYPE:
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
English
FAMILY ACC. NUM. COUNT: DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
WO 2002088131	A1 20021107	WO 2002-US12993	
		BA, BB, BG, BR, BY, BZ	
		DZ, EC, EE, ES, FI, GE	
		JP, KE, KG, KP, KR, KZ	
		MK, MN, MW, MX, MZ, NO	
		SI, SK, SL, TJ, TM, TN	
	VN, YU, ZA, ZM,		,,,
		SL, SZ, TZ, UG, ZM, ZW	, AT, BE, CH,
		GR, IE, IT, LU, MC, NI	
		GN, GQ, GW, ML, MR, NE	
CA 2445552	A1 20021107	CA 2002-2445552	20020423
AU 2002258988	A1 20021111	AU 2002-258988	20020423
		EP 2002-728968	20020423
EP 1401839	B1 20050907		
R: AT, BE, CH,	DE, DK, ES, FR,	GB, GR, IT, LI, LU, NI	, SE, MC, PT,
	LV, FI, RO, MK,	CY, AL, TR	
BR 2002009408	A 20040706	BR 2002-9408	20020423
JP 2004527561	T 20040909		
CN 1535274 AT 304016 ES 2247327	A 20041006	CN 2002-808817	
AT 304016	T 20050915	AT 2002-728968	
ES 2247327	T3 20060301	ES 2002-2728968	
MX 2003PA09828	A 20050307	MX 2003-PA9828	20031024
PRIORITY APPLN. INFO.:		US 2001-286579P	P 20010426
		WO 2002-US12993	W 20020423

OTHER SOURCE(S): MARPAT 137:353034 L10 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

The title compds. [I: R1-R5, R8 = H, halo, CN, etc.: R6, R7 = H, alkyl: 2 = CR8, N; n = 0-2], useful for the treatment of depression and other diseases such as obsessive compulsive disorder, panic attacks,

7.7

calized anxiety disorder, social anxiety disorder, sexual dyefunction, eating disorders, obesity, addictive disorders caused by ethanol or cocaine abuse

and related illnesses, were prepared Thus, reacting

and related illnesses, were prepared Thus, reacting
[(8R)-2-trifluoromethyl7,8-dihydro-3H-6,9-dioxa-1,3-diaza-cyclopenta[a]naphthalen-8-yl]methyl
4-methylbenzenesulfonate (multi-step synthesis given) with
5-fluoro-3-(1,2,3,6-tetrahydro-4-pyridinyl)-1H-indole in DMSO afforded
(S)-II which showed Ki of 3.07 nM against 5-HTlA receptor binding.
I 474623-43-59 474623-36-89 474623-51-3P
474623-53-59 474623-66-8P 474623-59-1P
474623-61-5P 474623-64-8P 474623-59-1P
474623-99-3P 474623-3-33-3P 474623-97-3P
474623-99-3P 474624-02-7P 474624-05-0P
474624-06-1P 474624-07-2P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU

RI: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(Uses)
 (preparation of antidepressant (SSRI) azaheterocyclylmethyl derivs. of
 7,8-dihydro-3H-6,9-dioxa-1,3-diazacyclopenta[a]naphthalene)
474623-47-7 CAPLUS
HH-[1,4]Dioxino[2,3-e]benzimidazole, θ-[[4-(5-fluoro-1H-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl]methyl)-7,8-dihydro-2-(trifluoromethyl)-, (8S)-

L10 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

Double bond geometry as shown.

 $\begin{array}{lll} 474623-51-3 & CAPLUS \\ 1H-\{1,4\}Dioxino\{2,3-e\}benzimidazole, & 8-\{\{3,6-dihydro-4-\{1H-indol-3-y1\}-1(2H)-pyridinyl\}methyl\}-7,8-dihydro-2-(trifluoromethyl)-, & (8S)- & (CA) \\ \end{array}$ INDEX

Absolute stereochemistry.

474623-53-5 CAPLUS
1H-[1,4]Dloxino[2,3-e]benzimidazole, 8-[[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl]-7,8-dihydro-2-(trifluoromethyl)-, (8S)-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CRN 474623-51-3 CMF C24 H21 F3 N4 O2

Absolute stereochemistry.

L10 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (CA INDEX NAME) (Continued)

Absolute stereochemistry.

474623-48-8 CAPLUS
1H-[1,4]Dioxino[2,3-e]benzimidazole, 8-[[4-[5-fluoro-lH-indol-3-yi]-3,6-dihydro-1(2H)-pyridinyl]methyl]-7,8-dihydro-2-(trifluoromethyl)-, (8S)-, (2E)-2-butenedioate (2:1) (SCI) (CA INDEX NAME)

CRN 474623-47-7 CMF C24 H20 F4 N4 O2

Absolute stereochemistry.

L10 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

474623-56-8 CAPLUS
1H-[1,4]Dioxino[2,3-e]benzimidazole, 8-[(4-(6-fluoro-lH-indol-3-y1)-3,6-dihydro-1(2H)-pyridinyl]methyl)-7,8-dihydro-2-(trifluoromethyl)-, (85)-, (2E)-2-butenedioate (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 474623-55-7 CMF C24 H20 F4 N4 O2

L10 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

но2с Е со2н

474623-59-1 CAPLUS
1H-[1,4]Dioxino[2,3-e]benzimidazole, 8-[{3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl]-7,8-dihydro-2-methyl-, (8S)-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 474623-58-0 CMF C24 H24 N4 O2

Absolute stereochemistry.

L10 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474623-64-8 CAPLUS 1H-[1,4]Dioxino[2,3-e]benzimidazole, 8-[[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl]-7,8-dihydro-1,2-dimethyl-, (8S)-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CRN 474623-61-5 CMF C25 H26 N4 O2

Absolute stereochemistry.

Double bond geometry as shown.

Page 35

L10 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

474623-61-5 CAPLUS
1H-[1,4]Dioxino{2,3-e}benzimidazole, 8-[(3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl]-7,8-dihydro-1,2-dimethyl-, (8S)- (CA INDEX NAME)

L10 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) HO2C E CO2H

474623-67-1 CAPLUS
1H-[1,4]Dloxino[2,3-e]benzimidazole, 8-[(3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl)-2-ethyl-7,8-dihydro-, (8S)- (CA INDEX NAME)

Absolute stereochemistry.

474623-69-3 CAPLUS
1H-[1,4]Dioxino[2,3-e]benzimidazole, 8-[{3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-pyridinyl]methyl]-2-ethyl-7,8-dihydro-, (8S)-, (2E)-2-butenedioate (1:1) (9CI) (CA IMDEX NAME)

CM 1

CRN 474623-67-1 CMF C25 H26 N4 O2

L10 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

но2С СО2Н

 $\begin{array}{lll} 474623-73-9 & CAPLUS \\ 1H-\{1,4]Dioxino\{2,3-e\}benzimidazole, & 8-\{\{4-\{7-fluoro-1H-indol-3-y1\}-3,6-dihydro-\{2H-pryidinyl\}methyl\}-7,8-dihydro-2-\{trifluoromethyl\}-,\{8S\}-,\{2E\}-2-butenedioate\{1:1\}\{9CI\}\} & (CA INDEX NAME) \end{array}$

CRN 474623-72-8 CMF C24 H20 F4 N4 O2

Absolute stereochemistry.

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

L10 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474623-93-3 CAPLUS
IH-[1,4]Dioxino[2,3-e]benzimidazole, 8-[(3,6-dihydro-4-(1H-indol-3-yl)1(2H)-pyridinyl)methyl]-7,8-dihydro-2-(trifluoromethyl)- (CA INDEX NAME)

 $474623-96-6 \quad CAPLUS \\ 1H-[1,4]Dioxino[2,3-e]benzimidazole, \\ 8-[[4-(6-fluoro-1H-indol-3-y1)-3,6-dihydro-12-(trifluoromethyl)- (CAINDEX NAME)$

L10 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

HO2C E CO2H

474623-77-3 CAPLUS
1H-[1,4]Dioxino[2,3-e]benzimidazole, 8-{[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl|methyl]-7,8-dihydro-2-(pentafluoroethyl)-, (8S)-,
(2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 474623-76-2 CMF C25 H21 F5 N4 O2

Absolute stereochemistry.

CM 2

Double bond geometry as shown.

но2с Е со2н

474623-90-0 CAPLUS
1H-[1,4]Dioxino[2,3-e]benzimidazole, B-[[4-{5-fluoro-lH-indol-3-yl}-3,6-dihydro-1(2H)-pyridinyl]methyl]-7,8-dihydro-2-(trifluoromethyl)- (CA INDEX NAME)

L10 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474623-99-9 CAPLUS
1H-[1,4]Dloxino[2,3-e]benzimidazole, 8-[[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl]-7,8-dihydro-2-methyl- (CA INDEX NAME)

474624-02-7 CAPLUS
IH-[1,4]Dioxino[2,3-e]benzimidazole, 8-[{3,6-dihydro-4-(IH-indol-3-yl)-1(2H)-pyridinyl]methyl}-7,8-dihydro-1,2-dimethyl- (CA INDEX NAME)

L10 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474624-05-0 CAPLUS

1H-[1,4]Dioxino[2,3-e]benzimidazole, 8-[[3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-pyridinyl]methyl]-2-ethyl-7,8-dihydro- (CA INDEX NAME)

474624-06-1 CAPLUS

HH-[1,4]Dioxino[2,3-e]benzimidezole, 8-[[4-(7-fluoro-1H-indol-3-y1)-3,6-dihydro-1(2H)-pyridinyl]methyl]-7,8-dihydro-2-(trifluoromethyl)- (CA INDEX NAME)

L10 ANSWER 20 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:849632 CAPLUS
DOCUMENT NUMBER: 137:353050
TITLE: 137:353050 of antidepressant azaheterocyclylmethyl derivatives of 2,3-dihydro-1,4-dioxino[2,3-

INVENTOR (S):

derivatives of 2,3-dihydro-1,4-dioxino[2,3-f]quinazoline Husbands, George Edward Morris; Stack, Gary Paul Wyeth, John, and Brother Ltd., USA PCT Int. Appl., 36 pp. CODEN: PIXXD2 Patent English PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE:

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. NO. KIND DATE APPLICATION

088129 A1 20021107 WD 2002-US12738 20020423

AE, AG, AL, AH, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, CM, HR, HU, ID, IL, IN, IS, JF, KE, KG, KF, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, KW, MZ, NO, NZ, OM, PL, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW

GH, GM, KE, LS, MM, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SZ, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

183341 A1 20021101 AU 2002-25709 20020423

3947 B2 20031202 US 2002-127926 20020423

AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PLN. INFO: KIND DATE APPLICATION NO. DATE WO 2002088129 WO 2002088129
W: AE, AG,
CO, CR,
GM, HR,
LS, LT,
PL, PT,
UA, UG,
RW: GH, GM,
BF, BJ,
AU 2002222709
US 2002183341
EP 1381612
R: AT, BE, PRIORITY APPLN. INFO.:

WO 2002-US12738

W 20020423

OTHER SOURCE(S): MARPAT 137:353058 L10 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474624-07-2 CAPLUS

1H-[1,4]Dioxino[2,3-e]benzimidazole, 8-[(3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl]-7,8-dihydro-2-(pentafluoroethyl)- (9CI) (CA INDEX

NAME)

REFERENCE COUNT:

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L10 ANSWER 20 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

The title compds. [I; R1, R3-R5, R7 = H, OH, halo, etc.; R2 = H, OH, AB halo,

The title compds. [I; R1, R3-R5, R7 = H, OH, halo, etc.; R2 = H, OH, , etc.; R6 = H, alkyl; Z = N, N-oxide; X = CR7, N; n = 0-2], useful for the treatment of depression and other diseases such as obsessive compulsive disorder, panic attacks, generalized anxiety disorder, social anxiety disorder, excual dysfunction, eating disorders, obseity, addictive disorders caused by ethanol or cocaine abuse and related illnesses, were prepared Thus, reacting (2R)-2,3-dihydro-1,4-dioxino(2,3-f)quinazolin-2-ylmethyl 4-methylbenzenesulfonate (multi-step synthesis given) with 5-fluoro-3-(1,2,3,6-tetrahydro-4-pyridinyl)-IH-indole in the presence of NaHCO3 in DMF/THF afforded 35X (S)-II which showed Ki of 51.53 nM against 5-HTIA receptor binding.
474607-77-79 474607-78-89 474607-78-89 474607-80-29 474607-81-39 474607-86-89 474607-90-48-80 474607-85-89 474607-90-49
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU

11

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(Uses)

(preparation of antidepressant azaheterocyclylmethyl derivs. of 2,3-dihydro-1,4-dioxino[2,3-f]quinazoline)

RN 474607-77-7 CAPIUS

CN 1,4-Dioxino[2,3-f]quinazoline,
2-[4-(5-f]uoro-1H-indol-3-y]-3,6-dihydro1(2H)-pyridinyl]methyl]-2,3-dihydro-, (2S)- (CA INDEX NAME)

L10 ANSWER 20 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued

RN 474607-78-8 CAPLUS
CN 1,4-Dioxino[2,3-f]quinazoline, 2-[[3,6-dihydro-4-(lH-indol-3-yl)-1(2H)-pyridinyl]methyl]-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

Absolute stereochemistry.

L10 ANSWER 20 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 474607-86-8 CAPLUS CN 1,4-Dioxino[2,3-f]quinazoline, 2-[{4-(5-fluoro-lH-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl)methyl)-2,3-dihydro- (CA INDEX NAME)

RN 474607-87-9 CAPLUS
CN 1,4-Dioxino[2,3-f]quinazoline, 2-[[3,6-dihydro-4-(lH-indol-3-yl)-1(2H)-pyridinyl]methyl]-2,3-dihydro- (CA INDEX NAME)

L10 ANSWER 20 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 474607-80-2 CAPLUS
CN 1,4-Dioxino[2,3-f]quinazoline, 2-[(3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl)-2,3-dihydro-8-methyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 474607-81-3 CAPLUS
CN 1,4-Dioxino[2,3-f]quinazoline, 2-[[3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-pyridinyl]methyl]-8-ethyl-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

L10 ANSWER 20 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 474607-88-0 CAPLUS
CN 1,4-Dioxino[2,3-f]quinazoline, 2-{[3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-pyridinyl}methyl]-2,3-dihydro-8-methyl-, 9-oxide (CA INDEX NAME)

RN 474607-89-1 CAPLUS
CN 1,4-Dioxino[2,3-f] quinazoline, 2-[[3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-pytidinyl]methyl]-2,3-dihydro-8-methyl- (CA INDEX NAME)

L10 ANSWER 20 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474607-90-4 CAPLUS
1,4-Dioxino[2,3-f]quinazoline, 2-{[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl}methyl]-8-ethyl-2,3-dihydro- (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

(Continued)

FORMAT

L10 ANSWER 21 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

The title compds. [I: Rl = H, OH, halo, etc.; R2-R4, R6 = H, halo, CN, etc.; R5 = H, alkyl: X = CR6, N; n = 0-2; Y = N, N-oxide], useful for the treatment of depression, obsessive compulsive disorder, panic attacks, generalized anxiety disorder, social anxiety disorder, sexual userion.

generalized anxiety disorder, social anxiety disorder, sexual dysfunction,
eating disorders, obesity, addictive disorders caused by ethanol or cocaine abuse, and dysthymia, were prepared Thus, reacting 3-(1,2,3,6-tetrahydro-4-pyridyl)-IH-indole with Z-bromo-3-((Zs)-oxiranylmethoxylpyridine (yield 71%) followed by cyclization of the intermediate afforded 52% (S)-II which showed Ki of 14.30 nM against 5-HT1A receptor binding.

IT 47396-68-BP 473996-69-9P 473996-70-2P 473996-81-5P 473996-72-4P 473996-72-8P 473996-81-5P 473996-72-6P 473996-81-5P 473996-82-6P 473996-83-7P 473996-81-5P 473996-82-6P 473996-83-7P 473996-81-5P (Preparation); USES (Uses)
(Pherapeutic use): BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of antidepressant azaheterocyclylmethyl derivs. of

(Uses)
{preparation of antidepressant azaheterocyclylmethyl derivs. of 1,4-dioxino[2,3-b]pyridine)
47,4-dioxino[2,3-b]pyridine)
47,4-bioxino[2,3-b]pyridine, 3-{[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl}-2,3-dihydro-, (3S)- (CA INDEX NAME)

Absolute stereochemistry.

Page 39

L10 ANSWER 21 OF 25 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2002:832806 CAPLUS DOCUMENT NUMBER: 137:337898 Preparation of access

137:337898
Preparation of antidepressant azaheterocyclylmethyl derivatives of 1,4-dioxino[2,3-b]pyridine
Tran, Megan; Stack, Gary Paul
Wyoth, John, and Brother Ltd., USA
PCT Int. Appl., 30 pp.
COOEN: PIXXD2
Patent

INVENTOR (S):

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE :

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

OTHER SOURCE(S):

MO 2002085911 A1 20021031 W0 2002-US12847 20020424

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CC, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GK, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MM, MM, MX, M2, NO, NZ, OM, PR, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MM, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GM, ML, MR, NE, NT, TD, TG
US 2002183355 A1 20021205 US 2002-127923 20020423
US 200402307501 A1 20021105 AU 2002-307501 20020424
US 2004058953 A1 2002105 AU 2002-307501 20020424
US 2004058953 A1 2002105 AU 2002-307501 20020424
US 2004058953 A1 20060117 B2 20030912 P P 20010425 PRIORITY APPLN. INFO.: US 2001-286301P P 20010425

US 2002-127923 A1 20020423

WO 2002-US12847 W 20020424

MARPAT 137:337898

L10 ANSWER 21 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN RN 473996-69-9 CAPLUS (Continued)

1/4-Dioxino(2,3-b)pyridine, 3-[[4-(5-fluoro-1H-indol-3-y1)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-, (3S)- (CA INDEX NAME)

Absolute stereochemistry.

473996-70-2 CAPLUS

HH-Indole-5-carbonitrile, 3-[1-[[(3S)-2,3-dihydro-1,4-dioxino[2,3-b]pyridin-3-yl]methyl]-1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX

Absolute stereochemistry.

473996-71-3 CAPLUS

1,4-Dloxino(2,3-b)pyridine, 3-{[4-(6-fluoro-lH-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl]methyl)-2,3-dihydro-, (3S)- (CA INDEX NAME)

Absolute stereochemistry.

473996-72-4 CAPLUS
1.4-Dioxino[2,3-b]pyridine, 3-[(3,6-dihydro-4-(1H-indol-3-y1)-1(2H)pyridinyl]methyl]-2,3-dihydro-, (3S)-, ethanedioate (1:1) (9CI) (CA NAME)

СМ

L10 ANSWER 21 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN CRN 473996-68-8 CMF C21 H21 N3 O2 (Continued)

Absolute stereochemistry

но- с- с- он || ||

473996-73-5 CAPLUS
1,4-Dioxino[2,3-b]pyridine, 3-[[4-(5-fluoro-lH-indol-3-y1)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-, (3S)-, ethanedicate (2:1) [9CI)

CM 1

CRN 473996-69-9 CMF C21 H20 F N3 O2

Absolute stereochemistry.

CM 2

L10 ANSWER 21 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN Absolute stereochemistry.

CRN 144-62-7 CMF C2 H2 O4

- c- c- он

473996-81-5 CAPLUS
1,4-Dioxino(2,3-b)pyridine, 3-[[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl)methyl}-2,3-dihydro- (CA INDEX NAME)

473996-82-6 CAPLUS
1,4-Dioxino(2,3-b)pyridine, 3-{[4-(5-fluoro-lH-indol-3-yl)-3,6-dihydro-l(2H)-pyridinyl)methyl)-2,3-dihydro- (CA INDEX NAME)

473996-83-7 CAPLUS IN-Indole-5-carbonitrile, 3-(1-[(2,3-dihydro-1,4-dioxino[2,3-b]pyridin-3-y)lmethyl]-1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX NAME)

L10 ANSWER 21 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN CRN 144-62-7 CMF C2 H2 O4 (Continued)

473996-74-6 CAPLUS
1H-Indole-5-carbonitrile, 3-[1-[[(3S)-2,3-dihydro-1,4-dioxino[2,3-b]pyridin-3-y]]methyl]-1,2,3,6-tetrahydro-4-pyridinyl]-, ethanedioate
(5:7) (CA INDEX NAME)

CRN 473996-70-2 CMF C22 H20 N4 O2

Absolute stereochemistry.

2 CM

CRN '144-62-7 CMF C2 H2 O4

но- с- с- он

473996-75-7 CAPLUS
1.4-Dioxino[2,3-b]pyridine, 3-[[4-(6-fluoro-lH-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-, (3S)-, ethanedicate (1:2) [9CI)

INDEX NAME)

CM 1

CRN 473996-71-3 CMF C21 H20 F N3 O2

L10 ANSWER 21 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

473996-84-8 CAPLUS 1,4-Dloxino[2,3-b]pyridine, 3-[[4-(6-fluoro-lH-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro- (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L10 ANSMER 22 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:832792 CAPLUS

DOCUMENT NUMBER: 137:337896
Freparation of antidepressant azaheterocyclylmethyl derivatives of 2,3-dhlydro-1,4-benzodioxane

Husbands, George Edward Morris; Stack, Gary Paul; Mewshaw, Richard Eric; Cliffe, Ian Anthony

Wyeth, John, and Brother Ltd., USA

POT Int. Appl., 34 pp.

COOM: PIXXD2

PAHLUY ACC. NUM. COUNT: English

FAMILUY ACC. NUM. COUNT: English

PATENT INFORMATION:

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. DATE APPLICATION NO. DATE KIND

W 20020423

WO 2002-US12843

OTHER SOURCE(S): MARPAT 137:337896

L10 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

$$\bigcirc CH_2 - N \bigcirc H$$

473993-80-5 CAPLUS
1H-Indole, 3-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-1,2,3,6-tetrahydro-4-pyridinyl]-5-fluoro- (CA INDEX NAME)

473993-81-6 CAPLUS
1,4-Benzodioxin-6-amine, 3-{[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl]-2,3-dihydro-, (3S)- (CA INDEX NAME)

Absolute stereochemistry.

473993-82-7 CAPLUS
1,4-Benzodioxin-6-amine, 2-{[3,6-dihydro-4-(1H-indo1-3-y1)-1(2H)-pyridinyl|methyl}-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 473993-83-8 CAPLUS CN H-Indole, 3-[1-{[(2S)-2,3-dihydro-8-methoxy-1,4-benzodioxin-2-y1]methy1]-

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L10 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

The title compds. (I; R1, R2 = H, halo, CN, etc.; R3-R5, R7 = H, halo,

The title compds. [I: Rl, R2 = H, halo, CN, etc.; R3-R5, R7 = H, halo, etc.; R6 = H, alkyl; X = CR7, N; n = 0-2], useful for the treatment of depression and other conditions such as obsessive compulsive disorder, panic attacks, generalized anxiety disorder, sexual dysfunction, eating disorders, addictive disorders caused by ethanol or cocaine abuse and related illnesses, were prepared Thus, reacting 2,3-dihydrobenzo(1,4)dioxin-2-ylmethyl 4-methylbenzenesulfonate with 5-methoxy-3-(1,2,3,6-tetrahydro-4-pyridinyl)-lH-indole in the presence of NaRCO3 in DMF/THF afforded II which showed Ki of 27.18 nM against 5-HTIA receptor blinding.
473993-79-2P 473993-80-5P 473993-81-6P 473993-2P 473993-83-8P 473993-83-8P 473993-80-P 473993-81-P 473993-83-8P 473993-90-7P 473993-81-6P 473993-80-9P 473993-91-P 473993-91-P 473994-01-3P 473994-01-3

(Uses)
 (preparation of antidepressant azaheterocyclylmethyl derivs. of
 2,3-dihydro-1,4-benzodioxane)
473993-79-2 CAPLUS
HH-Indole, 3-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-1,2,3,6-tetrahydro-4-pyridinyl]-5-methoxy- (CA INDEX NAME)

L10 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN 1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX NAME) (Continued)

Absolute stereochemistry.

473993-84-9 CAPLUS

RN 4/399-94-9 CAPADS
CN 1,4-Benzodioxin-6-amine,
2-[[4-(5-fluoro-1H-indol-3-yl)-3,6-dihydro-1(2H)pyridinyl]methyl]-2,3-dihydro-, (29)- (CA INDEX NAME)

Absolute stereochemistry.

Absolute stereochemistry.

473993-85-0 CAPLUS
1H-Indole-5-carbonitrile, 3-[1-[[(2S)-2,3-dihydro-8-methoxy-1,4-benzodioxin-2-yl]methyl]-1,2,3,6-tetrahydro-4-pyridinyl]-,
monohydrochloride (9CI) (CA INDEX NAME)

● HC1

L10 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RN 473993-86-1 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RN 473993-86-1 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
L10 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
L10 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
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L10 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2007 ACS ON STN (CONTINUED)
L10 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2007

Absolute stereochemistry.

RN 473993-87-2 CAPLUS
CN 1H-Indole,
3-{l-[(25)-2,3-dihydro-8-methoxy-1,4-benzodioxin-2-y1}methyl]1,2,3,6-tetrahydro-4-pyridinyl]-6-fluoro- (CA INDEX NAME)

473993-88-3 CAPLUS
1,4-Benzodioxin-5-carboxamide, 2-[[3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-pyridinyl]methyl]-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

L10 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

473993-92-9 CAPLUS
1H-Indole, 3-[1-[{(2S)-2,3-dihydro-8-methyl-1,4-benzodioxin-2-yl}methyl}-1,2,3,6-tetrahydro-4-pyridinyl}-5-fluoro- (CA INDEX NAME)

Absolute stereochemistry.

473993-93-0 CAPLUS
IH-Indole, 3-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-1,2,3,6tetrahydro-4-pyridinyl]-5-methoxy-, ethanedioate (1:1) (CA INDEX NAME)

CRN 473993-79-2 CMF C23 H24 N2 O3

CRN 144-62-7 CMF C2 H2 O4

L10 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 473993-89-4 CAPLUS
CN 1,4-Benzodioxin-5-carboxamide,
2-[(4-(5-fluoro-1H-indol-3-yl)-3,6-dihydro1(2H)-pyridinyl]methyl]-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

473993-90-7 CAPLUS
1H-Indole, 3-[1-[[(2S)-8-fluoro-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 47393-91-8 CAPLUS CN 1H-Indole, 3-{1-[(28)-2,3-dihydro-7-methoxy-1,4-benzodioxin-2-y1]methyl}-1,2,3,6-tetrahydro-4-pyridinyl}- (CA INDEX NAME)

Absolute stereochemistry.

L10 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

473993-94-1 CAPLUS | H-Indole, 3-(1-1/2,3-6-th-Indole, 3-(1-1/2,3-6-th-Indole, 3-(1-1/2,3-6-th-Indole,3-6-th-Indol

CM 1

CRN 473993-80-5 CMF C22 H21 F N2 O2

CM 2

CRN 144-62-7 CMF C2 H2 O4

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473994-01-3 CAPLUS
1H-Indole, 3-[1-[[(ZS)-2,3-dihydro-8-methyl-1,4-benzodioxin-2-yl]methyl]1,2,3,6-tetrahydro-4-pyridinyl]-5-fluoro-, ethanedioate (1:1) (CA INDEX NAME)

CM 1

CRN 473993-92-9 CMF C23 H23 F N2 O2

L10 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

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473994-02-4 CAPLUS
1,4-Benzodioxin-6-amine, 2-[[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl]-2,3-dihydro- (CA INDEX NAME)

473994-03-5 CAPLUS
1H-Indole, 3-[1-[(2,3-dihydro-8-methoxy-1,4-benzodioxin-2-yl)methyl]-1,2,3,6-tetrahydro-4-pyridinyl)- (CA INDEX NAME)

RN 473994-04-6 CAPLUS
CN 1,4-Benzodioxin-6-amine,
2-[{4-(5-fluoro-1H-indol-3-yl)-3,6-dihydro-1(2H)-

L10 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 473994-09-1 CAPLUS
CN 1,4-Benzodioxin-5-carboxamide,
2-{[4-{5-fluoro-1H-indol-3-y1)-3,6-dihydro-1(2H)-pyridinyl|methyl]-2,3-dihydro-(CA INDEX NAME)

473994-10-4 CAPLUS
IH-Indole, 3-[1-[(8-fluoro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX NAME)

473994-11-5 CAPLUS 1H-Indole, 3-(1-(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-y1)methyl]-1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX NAME)

473994-12-6 CAPLUS 1H-Indole, 3-[1-[(2,3-dihydro-8-methyl-1,4-benzodioxin-2-yl)methyl]-1,2,3,6-tetrahydro-4-pyridinyll-5-fluoro- (CA INDEX NAME)

Page 43

ANSWER 22 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN pyridinyl]methyl]-2,3-dihydro- (CA INDEX NAME) (Continued)

473994-05-7 CAPLUS
IH-Indole-5-carbonitrile, 3-[1-[(2,3-dihydro-8-methoxy-1,4-benzodioxin-2-yl)methyl]-1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX NAME)

RN 473994-06-8 CAPLUS

(N 1H-Pyrrolo[2,3-b]pyridine,
3-[1-[12,3-dihydro-6-methoxy-1,4-benzodioxin-2-y1)methyl]-1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX NAME)

473994-07-9 CAPLUS
1H-Indole, 3-[1-[(2,3-dihydro-8-methoxy-1,4-benzodioxin-2-y1)methyl]-1,2,3,6-tetrahydro-4-pyridinyl]-6-fluoro- (CA INDEX NAME)

473994-08-0 CAPLUS 1,4-Benzodioxin-5-carboxamide, 2-[(3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-pyridinyl]methyl]-2,3-dihydro- (CA INDEX NAME)

L10 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

473994-14-8 CAPLUS 1,4-Benzodioxin-6-amine, 3-[[3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-pyridinyl]methyl]-2,3-dihydro- (CA INDEX NAME)

473993-95-2P 473993-96-3P 473993-97-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of antidepressant azaheterocyclylmethyl derivs. of 2.3-dihydro-1.4-benzodioxane)
473993-95-2 CAPLUS
1H-Indole, 3-[1-[(2S)-2,3-dihydro-7-nitro-1.4-benzodioxin-2-yl]methyl]1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX NAME) IT

Absolute stereochemistry.

473993-96-3 CAPLUS
1H-Indole, 3-[1-[[(2S)-2,3-dihydro-6-nitro-1,4-benzodioxin-2-yl]methyl]1,2,3,6-tetrahydro-4-pyridinyl}- (CA INDEX NAME)

L10 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

473993-97-4 CAPLUS
1H-Indole, 3-[1-[{(2S)-2,3-dihydro-6-nitro-1,4-benzodioxin-2-yl]methyl}-1,2,3,6-tetrahydro-4-pyridinyl]-5-fluoro- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

(Continued)

FORMAT

PATENT NO. KIND DATE APPLICATION NO. DATE PATENT NO. KIND DATE APPLICATION NO. DATE

WO 2002072587 AI 20020919 WO 2002-US7192 20020312

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CM, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, NN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TH, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW

RN: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NI, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GM, GW, ML, MR, NS, NT, NT, GR

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Preparation of antidepressant azaheterocyclylmethyl

L10 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2002:716202 CAPLUS DOCUMENT NUMBER: 137:247706 Preparation of accessing the company of the company o

derivatives of

2,3-dihydro-1,4-dioxino[2,3-f]quinoline
INVENTOR(S):
PATENT ASSIGNEE(S):
SOURCE:
PCT Int. Appl., 66 pp.
CODEN: PIXXD2
DOCUMENT TYPE:
Patent

English

LANGUAGE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

OTHER SOURCE(S): MARPAT 137:247706

L10 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

The title compds. {I; R1 = H, OH, halo, CN, etc.; R2-R5, R7 = H, OH, halo,

AB The title compds. [I; Rl = H, OH, halo, CN, etc.; R2-R5, R7 = H, OH, halo, etc.; R6 = H, alkyl; A, D = CR1, N (provided that at least one of A and D = N); E, G = CR1; Z = N, CR7; n = 0-2], useful for the treatment of depression (including but not limited to major depressive disorder, childhood depression and dysthymia), anxiety, panic disorder (also known as premenstrual syndrome), attention deficit disorder (with and without hyperactivity), obsessive compulsive disorder with an axiotety disorder, generalized anxiety disorder, obesity, eating disorders such as anorexia nervosa, bulimia nervosa, vasomotor flushing, occaine and alc. addition, sexual dysfunction and related illnesses, were prepared Thus, reacting (2R)-2,3-dihydro[1,4]dioxino[2,3-f]quinolin-2-yimethyl-4-methylbenzenesulfonate (multi-step preparation given) with 5-methoxy-3-(1,2,3,6-total) and compds. I were tested in the three standard exptl. tests for serotonin 5-HTIA

Nareceptor activity (biol. data given).
460353-58-6P 460333-70-2P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent; USES (Uses) (preparation of antidepressant azaheterocyclylmethyl derivs, of 2,3-dihydro-1,4-dioxino[2,3-f]quinoline)
460353-58-6 CAPLUS
1,4-Dioxino[2,3-f]quinoline, 2-[(4-(5-fluoro-1H-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

L10 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

460353-70-2 CAPLUS

1,4-Dioxino[2,3-f]quinoline, 2-[[3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-pyridinyl]methyl]-8-ethyl-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

460353-57-5P 460353-59-7P 460353-60-0P 460353-61-1P 460353-62-2P 460353-63-3P 460353-64-4P 460353-65-5P 460353-66-6P 460353-68-9P 460353-71-3P 460353-77-5P 460353-77-5P 460353-78-5P 460353-77-9P 460353-78-5P 460353-78-5P 460353-78-5P 460353-78-5P 460353-78-5P 460353-87-7P 460353-87-5P 460353-97-5P 46035

L10 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
{Therapeutic use}; BIOL (Biological study); PREP (Preparation); USES

(Uses)
(prepn. of antidepressant azaheterocyclylmethyl derivs. of
2,3-dihydro-1,4-dioxino[2,3-f]quinoline)
460353-57-5 CAPLUS
1,4-Dioxino[2,3-f]quinoline, 2-[[3,6-dihydro-4-{5-methoxy-1H-indol-3-yl}-1(2H)-pyridinyl]methyl]-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

460353-59-7 CAPLUS 1,4-Dioxino[2,3-f]quinoline, 2-[[4-[(5-fluoro-lH-indol-3-yl)methyl]-l-piperidinyl]methyl]-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

460353-60-0 CAPLUS 1,4-Dioxino[2,3-f]quinoline, 2-[[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-

L10 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

460353-63-3 CAPLUS
1,4-Dioxino{2,3-f]quinoline, 2-[{4-(5-fluoro-1-methyl-1H-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl]methyl}-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

460353-64-4 CAPLUS 1,4-Dioxino[2,3-f]quinoline, 2-[[4-[(5-fluoro-lH-indol-3-yl)methyl]-l-piperidinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (CA INDEX NAME)

L10 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) pyridinyl]methyl]-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

460353-61-1 CAPLUS
1H-Indole-5-carbonitrile, 3-[1-[[(25)-2,3-dihydro-1,4-dioxino[2,3-f]quinolin-2-yl]methyl]-1,2,3,6-tetrahydro-4-pyridinyl}- (CA INDEX NAME)

460353-62-2 CAPLUS
1N-Indole-5-carboxamide, 3-[1-[[(2S)-2,3-dihydro-1,4-dioxino[2,3-f]quinolin-2-yl]methyl]-1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX NAME)

L10 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

460353-65-5 CAPLUS
1,4-Dioxino[2,3-f]quinoline, 2-[[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

460353-66-6 CAPLUS
1,4-0loxino[2,3-f]quinoline, 2-{[4-(6-fluoro-lH-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (CA INDEX NAME)

L10 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 460353-68-8 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-{5-fluoro-1H-indol-3-yl}-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 460353-69-9 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-2-{[4-(1H-indol-3-yl)-1-piperidinyl]methyl]-8-methyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

L10 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 460353-73-5 CAPLUS
CN 1,4-Dioxino[2,3-f|quinoline, 2-[[3,6-dihydro-4-(1H-indol-3-y1)-1{2H}-pyrtdinyl]methyl]-6-fluoro-2,3-dihydro-, (28)- (CA INDEX NAME)

Absolute stereochemistry.

RN 460353-74-6 CAPLUS
CN 1,4-Dioxino(2,3-f)quinoline, 2-{[4-(5-fluoro-1H-indol-3-y1)-3,6-dihydro-1(2H)-pyridinyl]methyl)-2,3-dihydro-6-methoxy-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

L10 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 460353-71-3 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoline, 8-ethyl-2-{[4-(5-fluoro-1H-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl]methyl}-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 460353-72-4 CAPLUS
CN 1.4-Dioxino[2,3-f]quinoline, 6-fluoro-2-[[4-(5-fluoro-1H-indol-3-y1)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-, (2S)- (CA INDEX NAME)
Absolute stereochemistry.

L10 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 460353-75-7 CAPLUS
CN 1,4-Dioxino{2,3-f}quinolin-8-amine, 2-[[4-(5-fluoro-1H-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

Absolute stereochemistry.

RN 460353-76-8 CAPLUS
CN 1,4-Dioxino[2,3-f)quinoline, 2-[[4-(7-ethyl-1H-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (CA INDEX NAME)

L10 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

460353-77-9 CAPLUS
1,4-Dioxino(2,3-f)quinoline, 2-[[4-(5-chloro-1H-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl|methyl]-2,3-dihydro-8-methyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

460353-78-0 CAPLUS
1,4-Dioxino[2,3-f]quinoline, 2-{[4-(7-fluoro-1H-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (CA INDEX NAME)

L10 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN CRN 460353-79-1 CMF C27 H27 N3 O2 (Continued)

Absolute stereochemistry.

CM 2

Double bond geometry as shown.

но2С СО2Н

460353-81-5 CAPLUS
1,4-Dioxino[2,3-f]quinoline, 2-[[3,6-dihydro-4-(1H-indol-3-y1)-1[2H)-pyridinyl]methyl]-2,3-dihydro-9-methyl-, (ZS)- (CA INDEX NAME)

Absolute stereochemistry.

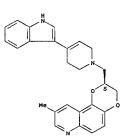
L10 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

 $\begin{array}{lll} 460353-79-1 & CAPLUS \\ 1,4-Dioxino[2,3-f]quinoline, & 2-[[3,6-dihydro-4-(5-methyl-1H-indol-3-yl)-1(2H)-pyridinyl]methyl]-2,3-dihydro-8-methyl-, & (2S)- & (CA INDEX NAME) \\ \end{array}$

Absolute stereochemistry.

460353-80-4 CAPLUS
1,4-Dioxino[2,3-f]quinoline, 2-{[3,6-dihydro-4-(5-methyl-1H-indol-3-yl)-1(2H)-pyridinyl]methyl]-2,3-dihydro-8-methyl-, (2S)-, (2E)-2-butenedioate (1:1) (9C1) (CA INDEX NAME)

L10 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



460353-82-6 CAPLUS 1,4-Dioxino[2,3-f]quinoline, 8-ethyl-2,3-dihydro-2-[[4-(1H-indol-3-yl)-1-piperidinyl]methyl]-, (28)- (CA INDEX NAME)

Absolute stereochemistry.

460353-83-7 CAPLUS
1,4-Dioxino[2,3-f]quinoline, 2-[[3,6-dihydro-4-(5-methoxy-lH-indol-3-yl)-1(2H)-pyridinyl]methyl]-2,3-dihydro-, (2S)-, (2E)-2-butenedioate (1:1)
(9C1) (CA INDEX NAME)

CM 1

CRN 460353-57-5 CMF C26 H25 N3 O3

L10 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

но2с € со2н

460353-84-0 CAPLUS
1,4-Dioxino[2,3-f]quinoline, 2-[[4-[(5-fluoro-lH-indol-3-yl)methyl]-1-piperidinyl]methyl]-2,3-dihydro-, (2S}-, ethanedioate (2:3) (9CI) (CA INDEX NAME)

CM 1

CRN 460353-59-7 CMF C26 H26 F N3 O2

Absolute stereochemistry.

L10 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

Double bond geometry as shown.

460353-86-0 CAPLUS
1H-Indole-5-carboxamide, 3-[1-[{(2S)-2,3-dihydro-1,4-dioxino[2,3-f]quinolin-2-yl]methyl]-1,2,3,6-tetrahydro-4-pyridinyl)-,(2E)-2-butenedioate {::1} (CA INDEX NAME)

Absolute stereochemistry.

L10 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

CRN 144-62-7 CMF C2 H2 O4

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460353-85-9 CAPLUS
1H-Indole-5-carbonitrile, 3-[1-[([28]-2,3-dihydro-1,4-dioxino[2,3-f]quinolin-2-yl]methyl]-1,2,3,6-tetrahydro-4-pyridinyl]-,
(2E)-2-butenedioate (1:1) (CA INDEX NAME)

CM 1

CRN 460353-61-1 CMF C26 H22 N4 O2

Absolute stereochemistry.

L10 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

HO2C E CO2H

460353-87-1 CAPLUS
1,4-Dioxino[2,3-f]quinoline, 2-[(4-{5-fluoro-1-methyl-1H-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl]methyl}-2,3-dihydro-, dihydrochloride, (2S)-(9CI)

(CA INDEX NAME)

L10 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

460353-88-2 CAPLUS
1,4-Dioxino[2,3-f]quinoline, 2-[[4-[6-fluoro-1H-indol-3-y1]-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-8-methyl-, (2S)-, ethanedioate (1:2)
(9CI) (CA INDEX NAME)

CM 1

CRN 460353-66-6 CMF C26 H24 F N3 O2

Absolute stereochemistry.

L10 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RN 460353-90-6 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-2-[[4-(1H-indol-3-y1)-1piperidinyl]methyl]-8-methyl-, (2S)-, (2E)-2-butenedioate (1:1) (9C1)

(CA INDEX NAME)

CM 1

CRN 460353-69-9 CMF C26 H27 N3 O2

Absolute stereochemistry.

CM 2

Double bond geometry as shown.

Absolute stereochemistry.

Page 49

L10 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN CM 2 (Continued)

460353-89-3 CAPLUS 1,4-Dioxino[2,3-f]quinoline, $2-[\{4-\{5-f]uoro-1H-indol-3-yl\}-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-8-methyl-, {2S}-, {2E}-2-butenedioate {1:1} (9C1) [CA INDEX NAME]$

CRN 460353-68-8 CMF C26 H24 F N3 O2

Absolute stereochemistry.

110-17-8 C4 H4 O4

Double bond geometry as shown.

L10 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

460353-92-8 CAPLUS
1,4-Dioxino[2,3-f]quinoline, 6-fluoro-2-[[4-(5-fluoro-1H-indol-3-y1)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-(2S)-, (2E)-2-butenedioate (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 460353-72-4 CMF C25 H21 F2 N3 O2

L10 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

HO2C E CO2H

RN 460353-93-9 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(5-fluoro-lH-indol-3-yl)-3,6-dihydro1(2H)-pyridinyl]methyl}-2,3-dihydro-6-methoxy-, (2S)-,
[2E)-2-butchedioate
(1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 460353-74-6 CMF C26 H24 F N3 O3

Absolute stereochemistry.

L10 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

Double bond geometry as shown.

460353-95-1 CAPLUS 1,4-Dioxino[2,3-f]quinoline, 8-ethyl-2,3-dihydro-2-[[4-(1H-indol-3-y1)-1-piperidinyl]methyl]-, (28)-, (2E)-2-butenedioate (9CI) (CA INDEX NAME)

CRN 460353-82-6 CMF C27 H29 N3 O2

Absolute stereochemistry.

L10 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

460353-94-0 CAPLUS
1,4-Dioxino[2,3-f]quinolin-8-amine, 2-[[4-(5-fluoro-1H-indol-3-y1)-3,6-dihydro-1(2H)-pyridinyl|methyl]-2,3-dihydro-, (2S)-, (2E)-2-butenedioate
(1:1) (9CI) (CA INDEX NAME)

CRN 460353-75-7 CMF C25 H23 F N4 O2

Absolute stereochemistry.

L10 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

HO2C E CO2H

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L10 ANSWER 24 OF 25 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 1999:100823 CAPLUS DOCUMENT NUMBER: 130:166383 130:168383
Preparation of 2-(azaheterocyclymethyl)-2,3,8,9-tetrahydro-7H-1,4-dioxino[2,3-e]indol-8-ones as antipsychotics.
Stack, Gary Paul
American Home Products Corporation, USA
U.S., 13 pp.
CODEN: USXXAM
Patent
Foolish DOCUMENT NUMBER: TITLE: INVENTOR (S): PATENT ASSIGNEE (S): SOURCE: DOCUMENT TYPE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE US 5869490 PRIORITY APPLN. INFO.: А 19990209 US 1997-947565 US 1997-947565 19971009 OTHER SOURCE(S): CASREACT 130:168383; MARPAT 130:168383

AB Title compds. [I: X = H2, O: R1 = H, OH, halo, CF3, OCF3, alkyl, alkoxy, aralkoxy, alkanoyloxy, amino, alkanamido, alkanesulfonamido: Z = (substituted) piperazinyl, (substituted) (henzo-fused) piperidinyl), were prepared Thus.

(R)-(2-tosyloxymethyl)-6-fluoro-2, 3, 8, 9-tetrahydro-7H-1, 4-dioxino[2, 3-e]indol-8-one and tetrahydroisoquinoline were heated 4 h in Me2SO to give (S)-2-(3, 4-dihydro-1H-isoquinolin-2-ylmethyl)-6-fluoro-2, 3, 8, 9-tetrahydro-7H-1, 4-dioxino[2, 3-e]indol-8-amine, isolated as the fumarate. This showed D2 receptor affinity whit ICSO = 0.23 nM.

IT 206355-42-22 220456-60-OP 220456-63-3P
R1: BaC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SFN (Synthetic preparation): THU (Therapeutic use)

(Biological study, unclassified); SPN (Synthetic preparation); TMU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of azaheterocyclymethyltetrahydrodioxinoindolones as antipsychotics)
RN 206355-42-2 CAPPUS
RN 8H-1,4-Dioxino[2,3-e]indol-8-one, 2-[(3,6-dihydro-4-(H-indol-3-v1)-1(2H)-pyridinyl]methyl]-6-fluoro-2,3,7,9-tetrahydro-, (2S)- (CA INDEX NAME)

L10 ANSWER 24 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

REFERENCE COUNT: THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE L10 ANSWER 24 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) Absolute stereochemistry.

220456-60-0 CAPLUS 8H-1,4-Dioxino[2,3-e]indol-8-one, 6-fluoro-2,3,7,9-tetrahydro-2-{[4-(1H-indol-3-y])-1-piperidinyl]methyl]- (CA INDEX NAME)

L10 ANSWER 25 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1998:251174 CAPLUS

DOCUMENT NUMBER: 128:308493
Preparation of azaheterocyclymethyl derivatives of 2,3,8,9-tetrahydro-7h-1,4-dioxino[2,3-e]indol-8-one for the treatment of brain dopamine dysregulation

Stack, Gary Paul
American Home Products Corporation, USA
PCT Int. Appl., 40 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: PIXED2
PATENT INFORMATION:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

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										wo	1997	-US18	1275	1	W 1	9971	010

OTHER SOURCE(S): MARPAT 128:308493

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

The title compds. [I: X = H2, O: R1 = H, OH, halo, etc.: Z = II, III, IV (wherein R2 = H, C1-6 alkyl, C3-8 cycloalkyl, etc.: R3 = H and R4 = H, (un)substituted 1-benzimidazolyl-2-one, indolyl, etc.: R3R4 taken

ner with the carbon atom to which they are attached form V or VI; R5 = H and R6 = (un)substituted Ph, naphthyl, thienyl, etc.; R5R6 taken together

the carbon atoms to which they are attached complete a benzene ring optionally substituted with R1)] and their salts, useful for the treatment of brain dopamine dysregulation, especially schizophrenia or a schizoaffective

L10 ANSWER 25 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) disorder, were prepd. Thus, reaction of (R)-2-(toluene-4-sulfonyloxymethyl)-2,3,8,9-tetrahydro-7H-1,4-dioxino[2,3-e]indol-8-one (prepn. described) with tetrahydroisoquinoline in DMSO afforded 82% (S)-I [X = H2; R1 = H; Z = 3,4-dihydro-1H-isoquinolin-2-y1] which showed IC50

of

Of

Of

OS nM against the dopamine D2 receptor binding.

IT 206355-42-2P 206355-44-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SFN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of azaheterocyclymethyl derivs. of

2,3,8,9-tetrahydro-7h-1,4
dioxino[2,3-e]indol-8-one for the treatment of brain dopamine dysregulation)

RN 206355-42-2 CAPLUS

CN 8H-1,4-Dioxino[2,3-e]indol-8-one,
2-[(3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl)methyl]-6-fluoro-2,3,7,9-tetrahydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

206355-44-4 CAPLUS 8H-1,4-Dioxino[2,3-e]indol-8-one, 6-fluoro-2,3,7,9-tetrahydro-2-[[4-(1H-indol-3-yl)-1-piperidinyl]methyl]-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

L10 ANSWER 25 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

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chain nodes :

11 19

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1 2 3 4 5 6 7 8 9 10 12 13 14 15 16 17 20 25 26 27 28 29 30

chain bonds :

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exact/norm bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 11-12 12-13 12-17 13-14 14-15 15-16 15-19 16-17 19-20 20-25 20-28 25-26 25-29 26-27 26-32 27-28 29-30 30-31 31-32

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Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:CLASS 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 19:CLASS 20:Atom 25:Atom 26:Atom 27:Atom 28:Atom 29:Atom 30:Atom 31:Atom 32:Atom

L11 STRUCTURE UPLOADED

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L11 HAS NO ANSWERS

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*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

Structure attributes must be viewed using STN Express query preparation.

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SAMPLE SEARCH INITIATED 16:08:06 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 859 TO ITERATE

100.0% PROCESSED 859 ITERATIONS 9 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 15422 TO 18938
PROJECTED ANSWERS: 9 TO 360

L12 9 SEA SSS SAM L11

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FULL SEARCH INITIATED 16:08:22 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 17072 TO ITERATE

100.0% PROCESSED 17072 ITERATIONS 222 ANSWERS

SEARCH TIME: 00.00.01

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ENTRY SESSION
FULL ESTIMATED COST
173.00 680.67

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE TOTAL
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L14 25 L13

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Page 57

L14 ANSWER 1 OF 25 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2004:1059361 CAPLUS DOCUMENT NUMBER: 142:38264 TITLE: Proparation of indole derivat: Preparation of indole derivatives with an improved antipsychotic activity Bartolome-Nebreda, Jose Manuel; Andres-Gil, Jose INVENTOR (S): Ignacio Janssen Pharmaceutica N.V., Belg. PATENT ASSIGNEE(S): SOURCE: PCT Int. Appl., 43 pp. CODEN: PIXXD2 DOCUMENT TYPE: Patent English 2 LANGUAGE: FAMILY ACC, NUM. COUNT: PATENT INFORMATION: MC 2004106346 A1 20041229 WO 2004-EP59922 20040526
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, RW: BW, GH, GM, KE, LS, MN, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, CM, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SN, TD, TG
WC 2004106298 A1 20041209 WC 2003-EP3057P4 MO 2004106298 A1 20041209
W: US
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
IT, LU, MC, NL, PT, RO, SE, SI, SK, TR
AU 2004242802 A1 20041209 CA 2004-242802 20040526
EP 1636239 A1 20060322 EP 2004-741649 20040526
EP 1636239 B1 20070718
EP 1636239 B1 20 239 B1 20070/18
AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, JP 2006-530219 US 2005-556931 WO 2003-EP5789 JP 2006528957 US 2007066608 PRIORITY APPLN. INFO.: 20061228 20040526 20051116 A 20030530 WO 2003-EP305789 A 20030530 WO 2004-EP50922 W 20040526 OTHER SOURCE(S): MARPAT 142:38264 * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT * L14 ANSWER 1 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN 805232-48-8 CAPLUS 1,4-Dioxino[2,3-c]pyridine, 3-[{4-(4-fluoro-lH-indol-3-y1)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-, ethanedioate (9CI) (CA INDEX NAME) СМ 2 - с- он || 805232-50-2 CAPLUS
1,4-Dioxino{2,3-c}pyridine, 3-{[4-(5-bromo-1H-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl}methyl]-2,3-dihydro-, ethanedioate (9CI) (CA INDEX NAME) CRN 805232-49-9 CMF C21 H20 Br N3 O2 СМ 2 CRN 144-62-7

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (preparation of indole derivs, with an improved antipsychotic (preparation of another productivity)
activity)
RN 473996-82-6 CAPLUS
CN 1,4-Dloxino[2,3-b]pyridine, 3-[[4-(5-fluoro-1H-indol-3-y1)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-(CA INDEX NAME)
H 805230-14-2 CAPLUS
1,4-Dioxino[2,3-c]pyridine, 3-[(4-(5-fluoro-1H-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro- (CA INDEX NAME) 805230-15-3 CAPLUS
1,4-Dloxino[2,3-c|pyridine, 3-[[4-(5-fluoro-1H-indol-3-yl)-1-piperidinyl|methyl]-2,3-dihydro- (CA INDEX NAME) ANSWER 1 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN CMF C2 H2 O4 (Continued) о о || || но- с- с- он 805232-52-4 CAPLUS
1,4-Dioxino[2,3-c]pyridine, 3-{[3,6-dihydro-4-(5-nitro-1H-indol-3-y1)-1(2H)-pyridinyl]methyl]-2,3-dihydro-, ethanedioate (9CI) (CA INDEX NAME) CRN 805232-51-3 CMF C21 H20 N4 O4 CM 2 144-62-7 C2 H2 O4 о о || || |- с- с- он 805232-53-5 CAPLUS 1,4-Dioxino[2,3-c]pyridine, 3-([3,6-dihydro-4-(5-nitro-1H-indol-3-yl)-1(2H)-pyridinyl]methyl]-2,3-dihydro-, (-)- (CA INDEX NAME)

805232-54-6 CAPLUS 1,4-Dioxino[2,3-c]pyridine, 3-[[3,6-dihydro-4-[5-nitro-1H-indol-3-y1]-1(2H)-pyridinyl]methyl]-2,3-dihydro-, (+)- (CA INDEX NAME)

Rotation (+).

L14 ANSWER 1 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

NO NO

RN 805232-56-8 CAPLUS
CN 1,4-Dioxino[2,3-c]pyridine, 3-[[4-(7-fluoro-1H-indol-3-y1)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-, ethanedioate (9CI) (CA INDEX NAME)

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CRN 605232-55-7 CMF C21 H20 F N3 O2

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CM 2

CRN 144-62-7

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RN 805232-57-9 CAPLUS
CN 1,4-Dioxino[2,3-c]pyridine, 3-[[4-(5-fluoro-1H-indol-3-y1)-1-piperidinyl]methyl]-2,3-dihydro-, ethanedioate (9CI) (CA INDEX NAME)

CM 1

CRN 805230-15-3 CMF C21 H22 F N3 O2

L14 ANSWER 1 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

o ch2 N H

RN 805232-61-5 CAPLUS
CN lH-Indole-5-carbonitrile, 3-[1-[(2,3-dihydro-1,4-dioxino[2,3-c]pyridin-3-y1)methyl1-4-piperidinyl]- (CA INDEX NAME)

 $\bigcap_{N \longrightarrow 0} \operatorname{CH}_2 - \bigcap_{N \longrightarrow N} \operatorname{CN}_N$

RN 805232-62-6 CAPLUS
CN 1H-Indole-5-carbonitrile, 3-{1-{{2,3-dihydro-1,4-dioxino[2,3-c}pyridin-3-y1)methyl}-4-piperidinyl}-, (-)- (CA INDEX NAME)

Rotation (-).

O CN

RN 805232-63-7 CAPLUS
CN 1H-Indole-5-carbonitrile, 3-[1-[(2,3-dihydro-1,4-dioxino[2,3-c]pyridin-3-yl)methyl]-4-piperidinyl]-, (+)- (CA INDEX NAME)

Rotation (+).

N. N. N.

RN 605232-65-9 CAPLUS
(1,4-Dioxino[2,3-c]pyridine, 3-[[4-(6-fluoro-lH-indol-3-yl)-1-piperidinyl]methyl]-2,3-dihydro-, ethanedioate (9CI) (CA INDEX NAME)

Page 58

L14 ANSWER 1 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CH2-N-H

CM 2

CRN 144-62-7

HO- C- C- OH

RN 805232-59-1 CAPLUS
CN 1,4-Dioxino[2,3-c]pyridine, 3-[[4-{5-chloro-lH-indol-3-yl}-1-piperidinyl]methyl]-2,3-dihydro-, ethanedioate (9CI) (CA INDEX NAME)

ом 1

CRN 805232-58-0 CMF C21 H22 C1 N3 O2

 $\bigcap_{N \longrightarrow 0} \operatorname{CH}_2 - N \longrightarrow \bigcap_{H} \operatorname{C}$

CM 2

CRN 144-62-7 CMF C2 H2 O4

но- c- c- о

RN 805232-60-4 CAPLUS CN 1H-Indol-5-ol, 3-{1-[(2,3-dihydro-1,4-dioxino[2,3-c)pyridin-3-y1)methyl}-4piperidinyl)- (CA INDEX NAME)

L14 ANSWER 1 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CRN 805232-64-8
CMF C21 H22 F N3 O2

0 CH2-N N

CM 2

CRN 144-62-7

HO- C- C- O

RN 805232-66-0 CAPLUS
CN 1,4-Dioxino[2,3-c]pyridine, 3-[[4-(7-fluoro-lH-indol-3-y1)-l-piperidinyl]methyl]-2,3-dihydro- (CA INDEX NAME)

RN 805232-69-3 CAPLUS
CN 1,4-Dioxino[2,3-c]pyridine, 3-[[4-[(5-fluoro-lH-indol-3-y1)methy1)-1piperidinyl]methyl]-2,3-dihydro-, ethanedioate [9CI] (CA INDEX NAME)

CM :

CRN 805232-68-2 CMF C22 H24 F N3 O2

CH2 — CH2 — N

CM 2

CRN 144-62-7 CMF C2 H2 O4 L14 ANSWER 1 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

REFERENCE COUNT:

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L14 ANSWER 2 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

ANSWER 2 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
The present invention relates to a novel indole derivs. I [al:a2a3:a4 = N:CHCH:CH, CH:CHCH:N, CH:CHCH:N, Z122 = OCH2O, O(CH2)2O, S(CH2)2O, etc.; X = CR6, N; R1-R4, R6 = H, halo, CN, etc.; p = 0-3; R5 = H, alkyl; Y = NR8 (CH2)n, II, III, etc.; m = 0-1; n = 0-6; R8 = H, halo, alkyl, etc.; with the proviso] and their pharmaceutically acceptable acid or base addition salts that exhibit a binding affinity towards dopamine receptors, in particular towards dopamine D2, D3 and D4 receptors, with selective serotonin reuptake inhibition properties and acting as 5-HTIA agonists or partial agonists. E.g., a multi-step synthesis of IV, starting from 2-chloro-3-pyridinamine, which showed pIC50 of 6.7 and 7.1 against D2 and D3 receptor binding, resp., was given. The invention also relates to pharmaceutical compns. comprising the compds. I, the use thereof for the prevention and/or treatment of a range of psychiatric and neurol. disorders, in particular certain psychotic disorders, most in particular schizophrenia and processes for their production 805230-14-2P 805230-13-3P for their production (Therapeutic use) BIOL (Biological study); PREP (Preparation); THU (Therapeutic use) BIOL (Biological study); PREP (Preparation); USES (Uses) IT

(preparation of indole derivs, with an improved antipsychotic

(preparation, but are activity)

RN 805230-14-2 CAPLUS

CN 1,4-Dioxino[2,3-c]pyridine, 3-[[4-(5-fluoro-lH-indol-3-yl)-3,6-dihydro1(2H)-pyridinyl]methyl]-2,3-dihydro- (CA INDEX NAME)

805230-15-3 CAPLUS 1,4-Dioxino[2,3-c]pyridine, 3-[[4-(5-fluoro-lH-indol-3-yl)-1-piperidinyl]methyl]-2,3-dihydro- (CA INDEX NAME)

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

L14 ANSWER 2 OF 25 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2004:1059319 CAPLUS DOCUMENT NUMBER: 142:38263 Preparation of indole derivatives with an improved antipsychotic activity Bartolome-Nebreda, Jose Manuel; Andres-Gil, Jose INVENTOR (S): Janacio
Janssen Pharmaceutica N.V., Belg.
PCT Int. Appl., 40 pp.
CODEN: PIXXD2
Patent PATENT ASSIGNEE(S): SOURCE: DOCUMENT TYPE: LANGUAGE: English 2 FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE • APPLICATION NO. DATE Al WO 2004106298 20041209 WO 2003-EP5789 20030530 Wo 2004106299 A1 20041209 Wo 2003-EP5789 20030530
W: US
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, F1, FR, GB, GR, HU, IE,
IT, LU, MC, NL, PT, RO, SE, SI, SK, TR
AU 2004242802 A1 20041209 AU 2004-242802 20040526
CA 2525282 A1 20041209 CA 2004-2525282 20040526
WO 2004106346 A1 20041209 WO 2004-EP50922 20040526 SN, TD, TG 239 A1 20060322 EP 2004-741649 20040526 239 B1 20070718 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, JP 2006528957 AT 367392 US 2007066608 20061228 20070815 20070322 JP 2006-530219 AT 2004-741649 US 2005-556931 WO 2003-EP305789 20040526 PRIORITY APPLN. INFO.: A 20030530

OTHER SOURCE(S): MARPAT 142:38263

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

WO 2003-EP5789

WO 2004-EP50922

A 20030530

W 20040526

L14 ANSWER 3 OF 25 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2004:331786 CAPLUS DOCUMENT NUMBER: 140:357375 Preparation of anxida-----

Preparation of antidepressant azaheterocyclylmethyl derivatives of 2,3-dihydro-1,4-dioxino(2,3-

INVENTOR (S):

derivatives or 2,3-dinydro-1,4-dioxino[2,3-f]quinoxaline
Gross, Jonathan L.; Stack, Gary P.
Wyeth, John, and Brother Ltd., USA
U.S. Pat. Appl. Publ., 12 pp., Cont.-in-part of U.S.
Ser. No. 128,722.
CODEN: USXXCO PATENT ASSIGNEE(S): SOURCE:

Patent English 2

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE US 2004077652 US 7008944 US 2002183329 US 6617327 PRIORITY APPLN. INFO.: 20040422 US 2003-618947 20030714 A1 B2 20021205 US 2002-128722 20020423 В2 20030909 US 2001-286438P P 20010426 US 2002-128722 A2 20020423

OTHER SOURCE(S): MARPAT 140:357375

The title compds. {I; R1, R4-R6, R8 = H, OH, halo, etc.; R2, R3 = H, alky1, halo, OH, CN, NH2; R7 = H, alky1; Z = CR8, N: n = 0-2}, useful for the treatment of depression and other diseases such as obsessive

L14 ANSWER 3 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) compulsive disorder, panic attacks, generalized anxiety disorder, social anxiety disorder, sexual dysfunction, eating disorders, obesity,

disorders caused by ethanol or cocsine abuse and related illnesses, were prepd. Thus, reacting (2R)-2,3-dihydro[1,4]dioxino[2,3-f]quinoxalin-2-ylmethyl 4-methylbenzenesulfonate (multi-step synthesis given) with 5-fluoro-3-(1,2,3,6-tetrahydro-4-pyridinyl)-IH-indole afforded 74% (S)-II which showed Ki of 17.72 nM against 5-HTIA receptor binding. 474607-96-29 474607-99-3P 474608-00-99 474608-01-0P RL: PAC (Pharmacological activity): SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(Uses)
(preparation of antidepressant azaheterocyclylmethyl derivs. of 2,3-dihydro-1,4-dioxino[2,3-f]quinoxaline)
RN 474607-96-0 CAPIUS
CN 1,4-Dioxino[2,3-f]quinoxaline,
2-[[4-(5-fluoro-1H-indol-3-yl)-3,6-dihydro1(2H)-pyridinyl]methyl)-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

474607-97-1 CAPLUS
1,4-Dioxino[2,3-f]quinoxaline, 2-[[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl|methyl|-2,3-dihydro-, (2S)- (CA INDEX NAME)

L14 ANSWER 3 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474608-00-9 CAPLUS

1,4-Dioxino[2,3-f]quinoxaline, 2-[[3,6-dihydro-4-(H-indol-3-y1)-1(2H)-pyridinyl]methyl]-8,9-diethyl-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

474608-01-0 CAPLUS
1,4-Dioxino[2,3-f]quinoxaline,
-diethyl-2-[[4-(5-fluoro-lH-indol-3-yl)3,6-dihydro-1(2H)-pyridinyl)methyl]-2,3-dihydro-, (2S}- (CA INDEX NAME)

Absolute stereochemistry.

L14 ANSWER 3 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474607-98-2 CAPLUS

4/400/-98-2 CAPLUS
1,4-Dioxino[2,3-f]quinoxaline, 2-[[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl]-2,3-dihydro-8,9-dimethyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

474607-99-3 CAPLUS
1,4-Dioxino[2,3-f]quinoxaline,
4-(5-fluoro-1H-indol-3-y1)-3,6-dihydro1(2H)-pyridinyl)methyl]-2,3-dihydro-8,9-dimethyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

L14 ANSWER 3 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

REFERENCE COUNT:

FORMAT

THERE ARE 23 CITED REFERENCES AVAILABLE FOR

RECORD. ALL CITATIONS AVAILABLE IN THE RE

L14 ANSWER 4 OF 25
ACCESSION NUMBER:
DOCUMENT NUMBER:
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1 Patent English 2 DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE

US 2004010006 US 6927226 US 2002183351 US 6573283 PRIORITY APPLN. INFO.: 20040115 A1 B2 A1 B2 US 2003-420333 20030422 20050809 20021205 20030603 US 2002-128762 20020423 US 2001-286579P P 20010426 US 2002-128762 A2 20020423

OTHER SOURCE(S): MARPAT 140:94051

L14 ANSWER 4 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 1

CRN 474623-47-7 CMF C24 H20 F4 N4 O2

Absolute stereochemistry.

2 CM

Double bond geometry as shown.

HO2C E CO2H

 $\begin{array}{lll} 474623-51-3 & CAPLUS \\ 1H-[1,4]Dioxino[2,3-e]benzimidazole, & & & & & & & & & \\ 1H-[1,4]Dioxino[2,3-e]benzimidazole, & & & & & & & \\ 1(2H)-pyridinyl]methyl]-7,8-dihydro-2-(trifluoromethyl)-, & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & & \\ & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & & \\ & \\ & & \\ & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & \\ & & \\ & \\ & & \\ & \\ & & \\$ INDEX

Absolute stereochemistry.

L14 ANSWER 4 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

The title compds. [I; R1-R5, R8 = H, halo, CN, etc.; R6, R7 = H, alkyl; 2 = CR8, N; n = 0-2], useful for the treatment of depression and other diseases such as obsessive compulsive disorder, panic attacks, realized.

ralized anxiety disorder, social anxiety disorder, sexual dysfunction, eating disorders, obesity, addictive disorders caused by ethanol or cocaine

disorders, obesity, addictive disorders caused by ethanol or cocaine abuse and related illnesses, were prepared Thus, reacting ([RR]-2-trifluoromethy][18R]-2-trifluoromethy][7,8-dihydro-3H-6,9-dioxa-1,3-diaza-cyclopenta(a]nsphthalen-8-y]]methyl 4-methylbenzenesulfonate (multi-step synthesis given) with 5-fluoro-3-(1,2,3,6-tetrahydro-4-pyridinyl]-lH-indole in DMSO afforded (S)-II Which showed Ki of 3.07 nM against 5-HTlA receptor binding.

IT 474623-47-1P 474623-48-8P 474623-51-3P 474623-59-1P 474623-55-8P 474623-56-8P 474623-57-1P 474623-61-5P 474623-67-1P 47623-67-3P 47623-73-9P 474623-77-3P 474623-99-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(Uses)
(preparation of antidepressant azaheterocyclylmethyl derivs. of
7,8-dihydro-3H-6,9-dioxa-1,3-diazacyclopenta(a)naphthalene)
474623-47-7 CAPLUS
1H-[1,4]Dioxino[2,3-e]benzimidazole, 8-[[4-(5-fluoro-lH-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl]methyl]-7,8-dihydro-2-(trifluoromethyl)-, (8S)(CA INDEX NAME)

Absolute stereochemistry.

L14 ANSWER 4 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474623-53-5 CAPLUS

4/4623-53-5 CAPUS
H+[1,4]Doxino[2,3-e]benzimidazole, 8-[[3,6-dihydro-4-[H-indol-3-yl]-12H]-pyridinyl]methyl]-7,8-dihydro-2-(trifluoromethyl)-, (8S)-, (2E)-2-butnedioate [1:1] (9Cl) (CA INDEX NAME)

CM 1

CRN 474623-51-3 CMF C24 H21 F3 N4 O2

Absolute stereochemistry.

CM

Double bond geometry as shown.

L14 ANSWER 4 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

HO2C E CO2H

 $\begin{array}{lll} 474623-56-8 & CAPLUS \\ 1H-\{1,4|Dioxino\{2,3-e\}benzimidazole,\ 8-\{\{4-(6-fluoro-1H-indol-3-y1)-3,6-dihydro-(2H)-pyridinyl\}methyl\}-7,8-dihydro-2-(trifluoromethyl)-, (8S)-, (2E)-2-butenedioate (2:1) (9CI) (CA INDEX NAME) \\ \end{array}$

CM 1

CRN 474623-55-7 CMF C24 H20 F4 N4 O2

Absolute stereochemistry.

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

 $474623-59-1 \quad CAPLUS \\ 1H-[1,4]Dioxino[2,3-e]benzimidazole, 8-[[3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-pyridinyl]methyl]-7,8-dihydro-2-methyl-, (8S)-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)$

CM 1

CRN 474623-58-0

L14 ANSWER 4 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

474623-64-8 CAPLUS
1H-[1,4]Dioxino[2,3-e]benzimidazole, 8-[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl]-7,8-dihydro-1,2-dimethyl-, (8S)-,
(2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CRN 474623-61-5 CMF C25 H26 N4 O2

Absolute stereochemistry.

CM 2

Double bond geometry as shown.

Page 62

L14 ANSWER 4 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN CMF C24 H24 N4 O2 (Continued)

Absolute stereochemistry.

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

474623-61-5 CAPLUS
1H-{1,4}Dloxino{2,3-e}benzimidazole, 8-[[3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-pyridiny1]methy1]-7,8-dihydro-1,2-dimethy1-, (8S)- (CA INDEX NAME)

L14 ANSWER 4 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) но2с СО2Н

474623-67-1 CAPLUS
1H-[1,4]Dioxino[2,3-e|benzimidazole, 8-{[3,6-dihydro-4-{1H-indol-3-yl}-1(2H)-pyridinyl]methyl]-2-ethyl-7,8-dihydro-, (8S)- (CA INDEX NAME)

Absolute stereochemistry.

474623-69-3 CAPLUS
1H-[1,4]Dioxino[2,3-e]benzimidazole, 8-[[3,6-dihydro-4-[1H-indol-3-yl]-1(2H)-pyridinyl]methyl]-2-ethyl-7,8-dihydro-, (8S)-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CRN 474623-67-1 CMF C25 H26 N4 O2

L14 ANSWER 4 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

HO2C E CO2H

474623-73-9 CAPLUS
1H-[1,4]Dioxino[2,3-e]benzimidazole, 8-[(4-(7-fluoro-1H-indol-3-yl)-3,6-dhydro-1(2H)-pyridinyl]methyl)-7,8-dhydro-2-(trifluoromethyl)-, (8S)-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 474623-72-8 CMF C24 H20 F4 N4 O2

Absolute stereochemistry.

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

L14 ANSWER 4 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

REFERENCE COUNT:

THERE ARE 19 CITED REFERENCES AVAILABLE FOR

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L14 ANSWER 4 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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 $\begin{array}{lll} 474623-77-3 & \text{CAPLUS} \\ 1\text{H-}[1,4] \text{Dloxino}[2,3-e] \text{benzimidazole}, & \text{B-}[3,6-dihydro-4-(1\text{H-}indol-3-yl)-1(2\text{H})-pyridinyl]} \\ 1(2\text{H})-pyridinyl] & \text{methyl}-7,8-dihydro-2-(pentafluoroethyl)-, (8S}-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME) \\ \end{array}$

CM 1

CRN 474623-76-2 CMF C25 H21 F5 N4 O2

Absolute stereochemistry.

CM 2

CRN 110-17-8 CMF C4 H4 Q4

Double bond geometry as shown.

474623-99-9 CAPLUS
1H-[1,4]Dioxino[2,3-e]benzimidazole, 8-[[3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-pyridinyl]methyl]-7,8-dihydro-2-methyl- (CA INDEX NAME)

CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
DOCUMENT NUMBER:
140:42186
Preparation of antidepressant azaheterocyclylmethyl
derivatives of 2, 3-dihydro-1, 4-benzodioxane
Husbands, George E. M.: Stack, Gary P.; Mewshaw,
Richard E.; Cliffe, Ian A.
Wyeth, John, and Brother Ltd., USA
U.S. Pat. Appl. Publ., 10 pp., Cont.-in-part of U.S.
Ser. No. 128, 477.
CODDE: USXXCO
DOCUMENT TYPE:
DANGUAGE:
PAMILY ACC. NUM. COUNT:
PATENT INFORMATION:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	DATE
	20030317
	20030317
	20020423
	20010424
,	20010424
A1	20020423
	P A1

US 2002-128477

A2 20020423

OTHER SOURCE(S):

MARPAT 140:42186

The title compds. [I; R1, R2 = H, halo, CN, etc.; R3-R5, R7 = H, halo,

etc.: R6 = H, alkyl: X = CR7, N: n = 0-2] and/or their pharmaceutically acceptable salts, useful for the treatment of depression and other conditions such as obsessive compulsive disorder, panic attacks,

L14 ANSWER 5 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) generalized anxiety disorder, sexual dysfunction, eating disorders, addictive disorders caused by ethanol or cocaine abuse and related illnesses, were prepd. Thus, reacting 2,3-dihydro-benzo[1,4]dioxin-2-ylnethyl 4-methylbenzenesulfonate with 5-methoxy-3-(1,2,3,6-tetrahydro-4-pyridinyl)-1H-indole in the presence of NaHCO3 in DMF/THF afforded II which showed Ni of 27.18 nM against 5-HTIA receptor binding.

1T 473993-82-79 473993-80-5P 473993-81-6P 473993-82-9P 473993-82-9P 473993-88-3P 473993-86-1P 473993-87-2P 473993-88-3P 473993-86-1P 473993-87-2P 473993-88-3P 473993-89-3P 473993-93-9P 473993-91-P 473993-91-P 473994-01-3P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(Uses)
(preparation of antidepressant azaheterocyclylmethyl derivs. of 2,3-dihydro-1,4-benzodioxane)
4393-79-2 CAPLUS
1H-Indole, 3-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-1,2,3,6-tetrahydro-4-pyridinyl]-5-methoxy- (CA INDEX NAME)

473993-80-5 CAPLUS
IN-Indole, 3-[1-1(2,3-dihydro-1,4-benzodioxin-2-yl)methyl}-1,2,3,6-tetrahydro-4-pyridinyl}-5-fluoro- (CA INDEX NAME)

473993-81-6 CAPLUS
1,4-Benzodioxin-6-amine, 3-[[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl]-2,3-dihydro-, (3S)- (CA INDEX NAME)

L14 ANSWER 5 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

473993-85-0 CAPLUS lH-Indole-5-carbonitrile, $3-[1-[[(2S)-2,3-dihydro-8-methoxy-1,4-benzodloxin-2-yl]methyl]-1,2,3,6-tetrahydro-4-pyridinyl}-, monohydrochloride [9CI) (CA INDEX NAME)$

Absolute stereochemistry.

● HC1

473993-86-1 CAPLUS
1H-Pyrrolo[2,3-b]pyridine, 3-[1-[[(2S)-2,3-dihydro-8-methoxy-1,4-benzodioxin-2-y1]methyl]-1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX

Absolute stereochemistry.

RN 473993-87-2 CAPLUS
CN 1H-Indole,
3-[1-[(2S)-2,3-dihydro-8-methoxy-1,4-benzodioxin-2-y1]methy1}-

Page 64

L14 ANSWER 5 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

473993-82-7 CAPLUS 1,4-Benzodioxin-6-amine, 2-[[3,6-dihydro-4-[1H-indol-3-y1]-1{2H}-pyridinyl]methyl]-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 473993-83-6 CAPLUS CN 1H-Indole, 3-[1-[((28)-2,3-dihydro-8-methoxy-1,4-benzodioxin-2-yl]methyl]-1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX NAME)

Absolute stereochemistry.

473993-84-9 CAPLUS 1,4-Benzodioxin-6-amine, [4-(5-fluoro-1H-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl)methyl)-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

L14 ANSWER 5 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Con 1,2,3,6-tetrahydro-4-pyridinyl)-6-fluoro- (CA INDEX NAME) (Continued)

Absolute stereochemistry.

473993-88-3 CAPLUS

1,4-Benzodioxin-5-carboxamide, 2-[[3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-pyridinyl]methyl)-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 473993-89-4 CAPLUS
CN 1,4-Benzodioxin-5-carboxamide,
2-{[4-(5-fluoro-1H-indol-3-y1)-3,6-dihydro1(2H)-pyridinyl]methyl]-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

473993-90-7 CAPLUS
1H-Indole, 3-[1-[[(2\$)-8-fluoro-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX NAME)

L14 ANSWER 5 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 473993-91-8 CAPLUS CN 1H-Indole, 3-[1-[[(25)-2,3-dihydro-7-methoxy-1,4-benzodioxin-2-y1]methyl]-1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX NAME)

473993-92-9 CAPLUS
1H-Indole, 3-[1-[{(2S)-2,3-dihydro-8-methyl-1,4-benzodioxin-2-yl}methyl]-1,2,3,6-tetrahydro-4-pyridinyl)-5-fluoro- (CA INDEX NAME)

473993-93-0 CAPLUS
1H-Indole, 3-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-1,2,3,6tetrahydro-4-pyridinyl]-5-methoxy-, ethanedioate (1:1) (CA INDEX NAME)

L14 ANSWER 5 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

473994-01-3 CAPLUS lH-Indole, 3-[1-[1(2S)-2,3-dihydro-8-methyl-1,4-benzodioxin-2-yl]methyl]-1,2,3,6-tetrahydro-4-pyridinyl]-5-fluoro-, ethanedioate (1:1) (CA INDEX NAME)

CM 1

CRN 473993-92-9 CMF C23 H23 F N2 O2

Absolute stereochemistry.

CM 2

CRN 144-62-7 CMF C2 H2 O4

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473993-95-2P 473993-96-3P 473993-97-4P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of antidepressant azaheterocyclylmethyl derivs. of 2,3-dihydro-1,4-benzodioxane) 473993-95-2 CRPUS 1H-Indole, 3-[1-[1(28)-2,3-dihydro-7-nitro-1,4-benzodioxin-2-yl]methyl]-1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX NAME)

Absolute stereochemistry.

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L14 ANSWER 5 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN CM 1 (Continued)

СМ 2

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473993-94-1 CAPLUS 1H-Indole, 3-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-1,2,3,6-tetrahydro-4-pyridinyl]-5-fluoro-, ethanedioate (1:1) (CA INDEX NAME)

CRN 473993-80-5 CMF C22 H21 F N2 O2

СМ

CRN 144-62-7 CMF C2 H2 O4

HO- C- C- OH

L14 ANSWER 5 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

473993-96-3 CAPLUS
HH-Indole, 3-[1-[[(2S)-2,3-dihydro-6-nitro-1,4-benzodioxin-2-yl]methyl]-1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX NAME)

Absolute stereochemistry.

473993-97-4 CAPLUS
1H-Indole, 3-{1-{{(28)-2,3-dihydro-6-nitro-1,4-benzodioxin-2-y1}methyl}-1,2,3,6-tetrahydro-4-pyridinyl}-5-fluoro- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: THIS

THERE ARE 17 CITED REFERENCES AVAILABLE FOR

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

10-556,931.trn L14 ANSWER 6 OF 25
ACCESSION NUMBER:
DOCUMENT NUMBER:
100:314012
Modulation of selective serotonin reuptake inhibitor and 5-HTIA antagonist activity in 8-azabicyclo[3.2.1]octane derivatives of 2,3-dihydro-1,4-benzodioxane
Gilbert. Adam M.; Stack, Gary P.; Nilakantan, Ramaswamy; Kodah, Jason; Tran, Megan; Scerni, Rosemary; Shi, Xiaojie; Smith, Deborah L.; Andree, Terrance H.

CORPORATE SOURCE: Chemical and Screening Sciences, Wyeth Research, CORPORATE SOURCE: River, NY, 10945, USA Bioorganic & Medicinal Chemistry Letters (2004), 14(2), 515-518 CODEN: BMCLE8; ISSN: 0960-894X Elsevier Science B.V. SOURCE: PUBLISHER: DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): Journal English CASREACT 140:314412 2,3-Dihydro-1,4-benzodioxanes with aryl 8-aza-bicyclo[3.2.1]oct-3-ene attachments produce compds. with potent 5-HT-T affinity, and weak 5-HTIA affinity and al affinity. This compares with 2,3-dihydro-1,4-benzodioxanes containing 8-aza-bicyclo[3.2.1] octan-3-ol attachments which possess potent 5-HTIA affinity, moderate to good selectivity over lpha1 and little 5-HT-T affinity. A 3-benzothlophene analog was synthesized which possesses potent 5-HTIA affinity and especially good selectivity. over both α1 and 5-HT-T. 678992-73-9P IT 678992-73-9P
RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); TRU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (modulation of selective serotonin reuptake inhibitor and 5-HTIA antagonist activity in 6-aza-bicyclo[3.2.1]octane derivs. of 2,3-dihydro-1,4-benzodioxane)
678992-73-9 CAPLUS
8-Azabicyclo[3.2.1]oct-2-ene, 8-[[(2S)-2,3-dihydro-8-methoxy-1,4-benzodioxin-2-yl]methyl]-3-(5-fluoro-1H-indol-3-yl)- (CA INDEX NAME) Absolute stereochemistry.

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR

L14 ANSWER 7 OF 25
ACCESSION NUMBER:
DOCUMENT NUMBER:
140:5054
TITLE:
INVENTOR(S):
PATENT ASSIGNEE(S):
SOURCE:

DOCUMENT TYPE:

CAPLUS COPYRIGHT 2007 ACS on STN
2003:950068 CAPLUS
140:5054
Preparation of antidepressant azaheterocyclylmethyl derivatives of 1,4,5-trioxa-phenanthrene
Tran, Megan; Stack, Gary P.
Wyeth, John, and Brother Ltd., USA
U.S. Pat. Appl. Publ., 9 pp., Cont.-in-part of U.S.
Ser. No. 132,238.
CODEN: USXXCO
Patent DOCUMENT TYPE: Patent English 2 LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003225157	Al	20031204	US 2003-377850	20030303
US 6906206	В2	20050614		
US 2002193401	A1	20021219	US 2002-132238	20020425
US 6555560	B2	20030429		
US 2005004209	A1	20050106	US 2004-881102	20040630
US 6943178	B2	20050913		
PRIORITY APPLN. INFO.:			US 2001-287448P P	20010430
			US 2002-132238 A	2 20020425
			US 2003-377850 A	3 20030303

OTHER SOURCE(S): MARPAT 140:5054

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

The title compds. [I: R1, R3-R5, R7 = H, halo, CN, etc.; R2, R6 = H, alkyl: Z = CR7, N; X = O, S, H2, F2: N = O-2], useful for the treatment of

diseases such as depression (including but not limited to major depressive

essive disorder, childhood depression and dysthymia), anxiety, panic disorder, post-traumatic stress disorder, premenstrual dysphoric disorder,

ntion
deficit disorder (with and without hyperactivity), obsessive compulsive
disorder (including trichotillomania), social anxiety disorder,
generalized anxiety disorder, obesity, eating disorders such as anorexia
nervosa, bulimia nervosa, vasomotor flushing, cocaine and alc. addiction,
sexual dysfunction and related illnesses, were prepared Novel

intermediates and selected lineases, were prepared novel II [R1, R2, X as above; Y = OH, halo, alkylsulfonate, trifluoromethanesulfonate, (un)substituted benzenesulfonate) were also prepared and claimed. Thus, reacting [(2R)-7-oxo-2, 3, 8, 9-tetrahydro-7H-[1, 4] dioxino[2, 3-h] chromen-2-yl]methyl 4-methylbenzenesulfonate

(preparation given) with 3-(1,2,3,6-tetrahydro-4-pyridinyl)-lH-indole afforded 18% (3)-lII which showed Ki of 2.74 nM in test for 5-HT transporter affinity. IT 474551-68-3P 474551-71-8P 474551-73-0P 474551-76-3P

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L14 ANSWER 6 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) RECORD. ALL CITATIONS AVAILABLE IN THE RE

L14 ANSWER 7 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); TRU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of antidepressant azaheterocyclylmethyl derivs. of
1,4,5-trioxa-phenanthrene)
RN 474551-68-3 CAPLUS
CN 7H-Pyrano[2,3-f]-1,4-benzodioxin-7-one,
2-[(4-(5-fluoro-1H-indol-3-y1)-3,6dihydro-1(2H)-pyridinyl|methyl]-2,3-dihydro-, (2S)-, (2E)-2-butenedioate
(1:1) (9CI) (CA INDEX NAME)

CRN 474551-67-2 CMF C25 H21 F N2 O4 Absolute stereochemistry.

CM 2 CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

474551-71-8 CAPLUS
1H-Indole, 5-fluoro-3-[1,2,3,6-tetrahydro-1-[[{25}-2,3,8,9-tetrahydro-7H-pyrano[2,3-f]-1,4-benzodioxin-2-yl]methyl]-4-pyridinyl]-, ethanedioate
[1:1] (CA INDEX NAME)

CM 1 L14 ANSWER 7 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN CRN 474551-70-7 CMF C25 H25 F N2 O3 (Continued)

Absolute stereochemistry.

2 CM

CRN 144-62-7 CMF C2 H2 O4

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RN 474551-73-0 CAPLUS
CN 7H-Pyrano[2,3-f]-1,4-benzodioxin-7-one,
2-[(3,6-dihydro-4-(1H-indol-3-y1)1(2H)-pyridinyl)methyl)-2,3,8,9-tetrahydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE REFERENCE COUNT: FORMAT

L14 ANSWER 7 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)

474551-76-3 CAPLUS

NAME 1 (CA IN-Indole, 3-[1,2,3,6-tetrahydro-1-[[{2S}-2,3,8,9-tetrahydro-7H-pyrano[2,3-f]-1,4-benzodioxin-2-yl]methyl]-4-pyridinyl]-, ethanedioate (1:1) (CA INDEX NAME)

ÇM 1

CRN 474551-75-2 CMF C25 H26 N2 O3

Absolute stereochemistry.

L14 ANSWER 8 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:678510 CAPLUS
TITLE: 19:214473
Preparation of antidepressant azaheterocyclylmethyl derivatives of Oxaheterocycle-fused-[1,4]-benzodioxans
INVENTOR(S): Stack, Gary P.; Gao, Hong; Gildersleeve, Elizabeth S. Wyeth, John, and Brother Ltd., USA Wyeth, John, and Brother Ltd., USA Ser. No. 131,340.
CODEN: USXXCO
DOCUMENT TYPE: LANGUAGE: Patent FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION: 2

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE US 2003162805 US 6706736 US 2002183353 US 6552049 PRIORITY APPLN. INFO.: 20030828 20040316 20021205 20030422 US 2003-377901 20030303 US 2001-286569P

OTHER SOURCE(S): MARPAT 139:214473

The title compds. [I; R1, R3-R5, R7 = H, halo, CN, etc.: Y = CO, C(R2)2 and Z = CH2, (CH2)2, CH:CH, NR2; or Y and Z, taken together, form CR2:CH, N:CR2, CR2:Nx R2, R6 = H, alkyl: X = CR7, N; n = 0-2], useful for the treatment of depression such as obsessive compulsive disorder, panic

L14 ANSWER 8 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) attacks, generalized anxiety disorder, social anxiety disorder, sexual dysfunction, eating disorders, obesity, addictive disorders caused by ethanol or cocaine abuse and related illnesses, were prepd. E.g., a 5-step synthesis of (3)-11, starting from (28)-(7-hydroxy-2,3-dihydro-1,4-benzodioxin-2-yl]methanol and 2,3-dichloro-1-propene, which showed Ki of 14.07 nM against 5-HTIA receptor binding, was given.

14 474621-95-99 474621-96-09 474621-97-1P 474621-95-09 474621-99-39 474622-00-99 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of antidepressant azaheterocyclylmethyl derivs. of

(Uses)
(preparation of antidepressant azaheterocyclylmethyl derivs. of oxaheterocycle-fused-[1,4]-benzodioxans)
474621-95-9 CAPLUS
HH-Indole, 3-[1-[(2S)-2,3-dihydro-8-methylfuro[3,2-f]-1,4-benzodioxin-2-yl]methyl]-1,2,3,6-tetrahydro-4-pyridinyl)- (CA INDEX NAME)

Absolute stereochemistry.

 $\begin{array}{lll} 474621-96-0 & CAPLUS \\ 1H-Indole, & 3-\{1,2,3,6-tetrahydro-1-\{\lceil(2S)-2,3,8,9-tetrahydrofuro\lceil3,2-f\rceil-1,4-benzodioxin-2-y1\}methyl]-4-pyridinyl]- & (CA INDEX NAME) \\ \end{array}$

Absolute stereochemistry.

L14 ANSWER 8 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 474621-99-3 CAPLUS CN 1H-Indole, 5-fluoro-3-[1,2,3,6-tetrahydro-1-[[(28)-2,3,9,10-tetrahydro-8H-pyrano[3,2-f]-1,4-benzodioxin-2-yl]methyl)-4-pyridinyl]- (CA INDEX NAME)

RN 474622-00-9 CAPLUS CN 1H-Indol= 11.2,3,6-tetrahydro-1-[[(2S)-2,3,9,10-tetrahydro-8H-pycano[3,2-f]-1,4-benzodioxin-2-yl]methyl]-4-pyridinyl]-, (ZE)-2-butenedioate (2:1) (CA INDEX NAME)

CM 1

CRN 474621-99-3 CMF C25 H25 F N2 O3

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L14 ANSWER 8 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474621-97-1 CAPLUS

RN 474621-97-1 CAPLUS
CN 1H-Indole,
3-[1-{[(28)-2,3-dihydrofuro[3,2-f]-1,4-benzodioxin-2-yl]methyl}1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX NAME)

Absolute stereochemistry.

474621-98-2 CAPLUS 1H-Indole, 3-{1,2,3,6-tetrahydro-1-{{(2S)-2,3,9,10-tetrahydro-8H-pyrano[3,2-f]-1,4-benzodioxin-2-yl}methyl}-4-pyridinyl}- (CA INDEX NAME)

Absolute stereochemistry.

L14 ANSWER 8 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN Absolute stereochemistry.

CM 2

Double bond geometry as shown.

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L14 ANSWER 9 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:551188 CAPLUS
DOCUMENT NUMBER: 139:117429
TITLE: Preparation of
indolyldihydropyridinylmethyltrioxaazac
yclopentanaphthalenes as serotonin reuptake

INVENTOR(S):
PATENT ASSIGNEE(S):
SOURCE:

and 5-HTIA antagonists.

Tran, Megan: Stack, Gary P.

Wyeth, John, and Brother Ltd., USA

U.S. Pat. Appl. Publ., 12 pp., Cont.-in-part of U.S.

CODEN: USXXCO

Patent

Patent English

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003134871	A1	20030717	US 2003-340424	20030110
US 6617334	B2	20030909		
US 2002183354	Al	20021205	US 2002-131987	20020425
US 6525075	B2	20030225		
US 2003109562	Al	20030612	US 2003-340413	20030110
US 6613913	B2	20030902		
PRIORITY APPLN. INFO.:			US 2001-287449P	20010430
			US 2002-131987 P	2 20020425

OTHER SOURCE(S):

MARPAT 139:117429

A method of treating posttraumatic stress disorder, premenstrual

AB A method of transported dysphoric disorder, attention deficit disorder, obesity, eating disorders,

flushing, cocaine and alc. addiction, and sexual dysfunction, comprises providing title compds. (I; R1, R2, R3, R4, R5, R7 \mp H , halo, cyano,

ANSWER 9 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474622-50-9 CAPLUS [1,4]Dioxino[2,3-qjbenzoxezole, 8-[[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl]-7,8-dihydro-2-methyl-, (8S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 474622-51-0 CAPLUS
CN 1H-Indole-5-carbonitrile,
3[1-[[(83)-7,8-dihydro-2-methyl[1,4]dioxino[2,3g[benzoxazol-8-yl]methyl]-1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX NAME)

Absolute stereochemistry.

L14 ANSWER 9 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) carboxamido, carboalkoxy, CF3, alkyl, alkoxy, alkanoyloxy, amino monoor dialkylamino, alkanamido, alkanesulfonamido; R6 = H, alkyl; dotted

- optional double bond; Z = CR7, N; n = 0, 1, 2). Thus,
[(8R)-2-methyl-7,8-dihydro[1,4]dioxino[2,3-g][1,3]benzoxazol-8-yl]methyl
4-methylbenzenesulfonate (prepn. given) and 3-(1,2,3,6-tetrahydro-4pyridinyl)-Hi-indole-5-carbonitrile were heated in DMSO at 75-80°
to give (S)-3-{1-[2-methyl-7,8-dihydro-1,6,9-trioxa-3-

azacyclopenta[a]naphthalen-8-ylmethyl]-1,2,3,6-tetrahydropyridin-4-yl]-1Hindole-5-carbonitrile. The latter showed 5-HT transporter affinity and
5-HT1H receptor affinity with Xi = 1.68 nM and 9.56 nM, resp.

IT 474622-48-5P 474622-49-6P 474622-50-9P
474622-51-0P 474622-52-1P 474622-53-2P
474622-51-0P 474622-55-4P 474622-56-5P

RI: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(Uses)
(preparation of
indolyddhydropyridinylmethyltrioxaazacyclopentanaphthalenes
as serotonin reuptake inhibitors and 5-HTIA antagonists)
RN 474622-48-5 CAPUJS
CN [1,4|Dioxino[2,3-g]benzoxazole, 8-{[3,6-dihydro-4-(1H-indol-3-y1)-1{2H}-pyridinyl}methyl]-7,8-dihydro-, (8S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 474622-49-6 CAPLUS
CN {1,4|Dioxino[2,3-g]benzoxezole,
8-{[4-(5-fluoro-lH-indol-3-yl)-3,6-dihydro1(2H)-pyridinyl)methyl}-7,8-dihydro-2-methyl-, (8S)- (CA INDEX NAME)

L14 ANSWER 9 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 474622-52-1 CAPLUS
CN 1H-Indole-5-carbonitrile,
3-[1-[[[63]-7,8-dihydro-2-methyl][1,4]dioxino[2,3g|benzoxazol-8-yl]methyl]-1,2,3,6-tetrahydro-4-pyridinyl]-,
(ZE)-2-butenedioate (1:2) (CA INDEX NAME)

CM 1

CRN 474622-51-0 CMF C25 H22 N4 O3

Absolute stereochemistry.

Double bond geometry as shown.

L14 ANSWER 9 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

но2С Е СО2Н

RN 474622-53-2 CAPLUS
CN {1,4|Dioxino{2,3-g|benzoxazole,}
8-{{4-(7-fluoro-1H-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl}methyl]-7,8-dihydro-2-methyl-, (8S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 474622-54-3 CAPLUS
CN [1,4]Dloxino[2,3-g]benzoxazole,
8-[(4-(6-fluoro-1H-indol-3-yl)-3,6-dihydro1(2H)-pyridinyl]methyl}-7,8-dihydro-2-methyl-, (8S)- (CA INDEX NAME)

Absolute stereochemistry.

L14 ANSWER 9 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN CMF C24 H22 C1 N3 O3 (Continued)

Absolute stereochemistry.

CM 2

Double bond geometry as shown.

L14 ANSWER 9 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 474622-55-4 CAPLUS
CN [1,4]Dioxino[2,3-q]benzoxazole,
8-{[4-(5-c-hloro-1H-indol-3-y1)-3,6-dihydro1(2H)-pyridinyl]methyl]-7,8-dihydro-2-methyl-, (8S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 474622-56-5 CAPLUS
CN [1,4]Dioxino[2,3-g]benzoxazole,
B-{[4-{5-chloro-1H-indol-3-yl}-3,6-dihydro1(2H)-pyridinyl]methyl]-7,8-dihydro-2-methyl-, (8S)-, (2E)-2-butenedioate
(2:1) [9CI] (CA INDEX NAME)

CM 1

CRN 474622-55-4

L14 ANSWER 10 OF 25 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2003:551187 CAPLUS DOCUMENT NUMBER: 139:117428 TITLE: Preparation of

TITLE: 139:11742. CAFEUS

TITLE: Preparation of indolyldihydropyridinylmethyldihydrodio xinoindoles as serotonin reuptake inhibitors and S-HTIA antagonists.

INVENTOR(S): Stack, Gary P.: Tran, Megan; Bravo, Byron A. Wyeth, John, and Brother Ltd., USA U.S. Pat. Appl. Publ., 11 pp., Cont.-in-part of U.S. Ser. No. 131,339. CODEN: USXXCO

DOCUMENT TYPE: Patch Publ. Pu

English 2

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003134870	A1	20030717	US 2003-339511	20030109
US 6627639 US 2002183352	B2 A1	20030930 20021205	US 2002-131339	20020424
US 6593350 PRIORITY APPLN, INFO.:	B2	20030715	US 2001-286575P P	20010426
				2 20020424

OTHER SOURCE(S): MARPAT 139:117428

AB A method of treating posttraumatic stress disorder, premenstrual dyaphoric disorder, attention deficit disorder, obesity, eating disorders, vasomotor flushing, cocaine and alc. addiction, and sexual dysfunction, comprises provision of title compds. (1; Pl. R3, R4, R5, R7 = H. halo, cyano, carboxamido, carboxamido, carboxamido, carboxamido, carboxamido, carboxamido, carboxamido, carboxamido, carboxamido, alkanamido, alkanesulfonamido; R2 = H, halo, alkyl; R6 = H

, alkyl; Z = CR7, N). Thus,
[(2R)-8-methyl-2,3-dihydro-7H-{1,4}dioxino{2,3-e}indol-2-yl]methyl 4-methylbenzenesulfonate (preparation given) and 3-(1,2,3,6-tetrahydro-4-pyridinyl)-lH-indole in DMSO were heated at

L14 ANSWER 10 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
65-67* for 4 h to give (S)-2-[(4-(1H-indol-3-y1)-3,6-dihydropyridin1(2H)-y1)methy1)-8-methy1-2,3-dihydro-7H-[1,4]dioxino[2,3-e]indole.
1T 474544-34-80 F474544-34-179
RL: PRC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use): BIOL (Biological study); PREP (Preparation); USES
(Uses)

(preparation of indolyldihydropyridinylmethyldihydrodioxinoindoles as
serotonin reuptake inhibitors and 5-HT1A antagonists)
RN 474544-34-8 CAPLUS
CT 7H-1,4-Dioxino[2,3-e]indole, 2-[[3,6-dihydro-4-(1H-indol-3-y1)-1(2H)pyridinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

474544-36-0 CAPLUS
7H-1,4-Dioxino[2,3-e]indole, 2-[[3,6-dihydro-4-(lH-indol-3-yl}-1{2H}-pyridinyl]methyl]-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

L14 ANSWER 10 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

474544-41-7 CAPLUS 7H-1,4-Dioxino[2,3-e]indole, 8-ethyl-2-[[4-(5-fluoro-lH-indol-3-y1)-3,6-dihydro-1(2H)-pycidinyl]methyl]-2,3-dihydro-, (2S)- (CA INDEX NAME)

(Continued)

Absolute stereochemistry.

L14 ANSWER 10 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474544-38-2 CAPLUS
7H-1,4-Dioxino[2,3-e]indole, 2-{[4-(5-fluoro-1H-indol-3-y1)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

474544-39-3 CAPLUS
7H-1,4-Dioxino[2,3-e]indole, 2-[[3,6-dihydro-4-(lH-indol-3-yl)-1(2H)-pyridinyl]methyl]-8-ethyl-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

L14 ANSWER 11 OF 25
ACCESSION NUMBER:
DOCUMENT NUMBER:
171:384846
Process for preparation of indolylpyridinylmethyldioxinoquinolines and related compounds
Chan, Anita Wai-Yin; Curran, Timothy Thomas; Iera, Silvior Chew, Warren; Sellstedt, John Hamilton; Vid, Galina; Peigelson, Gregg; Ding, Zhixian
Wyeth, John and Brother Ltd., USA
PATENT ASSIGNEE(8):
SOURCE:
DOCUMENT TYPE:
LANGUAGE:
FAMILY ACC. NUM. COUNT:
FAMILY ACC. NUM. COUNT:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:

PA'	PENT	NO.			KIN		DATE			APP	LICAT	ION	NO.			ATE	
	2002		02							WQ	2002-	US15	097				
WO	2002	0926	02		A3		2003	0227									
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB	, BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC	, EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE	, KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN	, MW,	MX,	MZ,	NO,	NZ,	OM,	PH,
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK	, SL,	TJ.	TM.	TN,	TR,	TT.	TZ.
		UA,	UG,	UZ,	VN,	YU,	ZA,	ZM.	ZW								
	RW:	GH,	GM,	KE,	LS,	MW,	MZ.	SD.	SL.	SZ	. TZ.	UG,	ZM,	ZW.	AT.	BE,	CH.
		CY,	DE.	DK.	ES,	FI.	FR.	GB.	GR.	IE	, IT,	LU.	MC.	NL.	PT.	SE.	TR.
											, GW,						
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AU	2002	3097	69		A1		2002	1125		AU	2002-	3097	69		2	0020	514
US	2002	1879	83		Al		2002	1212		US	2002-	1453	69		2	0020	514
US	6693	197			B2		2004	0217			2002-						
EP	1387	845			A2		2004	0211		EР	2002-	7367	90		2	0020	514
	R:	AT,	BE,	CH,	DE.	DK,	ES.	FR.	GB.	GR	, IT,	LI.	LU,	NL.	SE.	MC.	PT.
CN	1509	290			A		2004	0630		CN	2002-	8100	67		2	0020	514
BR	2002	0099	01		Α		2004	0713		BR	2002-	9901			2	0020	514
JP	2004	5306	93		Ŧ		2004	1007		JР	2002-	5894	86		2	0020	514
MX	2003	PA10	524		A		2005	0307		MX	2003-	PA10	524		2	0031	117
ŲS	2004	1861	23		A1		2004	0923		US	2003-	7348	67		2	0031	212
US	7038	052			B2		2006	0502			2002- 2002- 2002- 2003- 2003- 2005-						
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US	7166	723			B2		2007	0123									
US	2007	1237	05		Al		2007	0531		US	2006-	5665	28		2	0061	204
ORIT	Y APP	LN.	INFO	. :						US	2006-	2915	47P		P 2	0010	517
										US	2002-	1453	69		A3 2	0020	514
										WO	2002-	US 1 5	097		W 2	0020	514
										US	2003-	7348	67		A3 2	0031	212
											2005-						

OTHER SOURCE(S):

CASREACT 137:384846; MARPAT 137:384846

L14 ANSWER 11 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

AB Title compds. [I; Rl = H, OH, halo, cyano, carboxamido, carboalkoxy, alkyl, alkanoyloxy, amino, mono- or dialkylamino, alkanamido, alkanesulfonamido; R2, R3, R4, R6 = H, OH, halo, cyano, carboxamido, carboalkoxy, Cf3, alkyl, alkoxy, alkanoyloxy, amino, mono- or dialkylamino, alkanamido, alkanesulfonamido; R5 = H, alkyl; dotted line = optional double bond; A, D = CR1, N; provided that ≥1 of A and D = N; E, G = CR1; Z = N, CR6], were prepared by a 7-step process. Thus, [(2R)-8-methyl-2, 3-dihydro[1,4]dioxino[2,3-f]quinolin-2-yl]methyl 4-methylbenzenesulfonate (preparation given),
3-(1,2,3,6-tetrahydropyridin-4-yl)-1H-indole (preparation given) and K2CO3 were heated in THF:DMF at 80-83* for 10 h to give 72% (2S)-2-(4-(1H-indol-3-yl)-3,6-dihydro-2H-pyridin-1-ylmethyl)-8-methyl-2,3-dihydro-1,4-dioxino[2,3-f]quinoline.
IT 460353-65-5P

IMF (Industrial manufacture); SPN (Synthetic preparation); PREP

(process for preparation of indolylpyridinylmethyldioxinoquinolines and

related compds.)
460333-65-5 CAPLUS
1,4-Dioxino[2,3-f]quinoline, 2-[[3,6-dihydro-4-(lH-indol-3-yl)-1(2H)-pyridinyl]methyl)-2,3-dihydro-8-methyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

L14 ANSWER 12 OF 25 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2002:849647 CAPLUS DOCUMENT NUMBER: 137:353044 Preparation of antidepressant indoletetrahydropyridine derivatives of 2,3-dihydro-7H-[1,4]dioxino[2,3-Gelindole 12,3-dingdro-In-[1-4]-GloxIno[2,3-e]-Indole Stack, Gary Paul; Tran, Megan; Bravo, Byron Abel Wyeth, John, and Brother Ltd., USA PCT Int. Appl., 30 pp. CODEN: PIXXD2 Patent English 2 INVENTOR(S): PATENT ASSIGNEE(S): SOURCE: DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE

WO 2002-US13118

W 20020425

OTHER SOURCE(S): MARPAT 137:353044 L14 ANSWER 11 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

L14 ANSWER 12 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

The title compds. [I; R1, R3-R5, R7 = H, halo, CN, etc.; R2 = H, halo, alkyl, CF3; R6 = H, alkyl; R6 = H, alkyl; Z = CR7, N], useful in the treatment of central nervous system disorders including depression, obsessive compulsive disorder, panic attacks, generalized anxiety disorder, sexual dysfunction, eating disorders, and addictive disorders caused by ethanol or cocaine abuse, were prepared E.g., a 8-step heasis AB

caused by ethanol or cocaine abuse, were prepared E.g., a 8-step synthesis of (5)-II, starting from 5-nitroguaiacol and allyl bromide, which showed Ki of 3.44 nM when tested for 5-HT transporter affinity, was given. IT 474544-34-8P 474544-35-0P 474544-38-2P 474544-55-3P 474544-1-7P 474544-53-1P 474544-55-3P 474544-55-3P 474544-55-3P 474544-55-3P 474544-55-3P 474544-55-3P 474544-55-3P 47454-45-3P 474544-55-3P 474544-55-3P 474544-55-3P 474544-55-3P 474544-57-5P 47454-57-5P 47454-5P 4745

474544-50-09 RI: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(preparation of antidepressant indoletetrahydropyridine derivs. of 2,3-dihydro-7H-[1,4]dloxino[2,3-e]indole) 474544-34-8 CAPLUS

474544-34-8 CAPLUS
7H-1,4-Dioxino[2,3-e]indole, 2-[[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (CA INDEX NAME)

L14 ANSWER 12 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 474544-36-0 CAPLUS
CN 7H-1,4-Dioxino{2,3-e}indole, 2-{{3,6-dihydro-4-(1H-indol-3-yl}-1{2H}-pyridinyl]methyl]-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 474544-38-2 CAPLUS
CN 7H-1,4-Dioxino[2,3-e]indole, 2-[[4-(5-fluoro-lH-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

L14 ANSWER 12 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 474544-53-1 CAPLUS
CN 7H-1,4-Dioxino[2,3-e]indole, 2-[[3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-pyridinyl[methyl]-2,3-dihydro-8-methyl- (CA INDEX NAME)

RN 474544-55-3 CAPLUS
CN 7H-1,4-Dioxino[2,3-e]indole, 2-[[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl]-2,3-dihydro- (CA INDEX NAME)

L14 ANSWER 12 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 474544-39-3 CAPLUS
CN 7H-1,4-Dioxino[2,3-e]indole, 2-[[3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-pyridinyl]methyl]-8-ethyl-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 474544-41-7 CAPLUS
CN 7H-1,4-Dioxino[2,3-e]indole, 8-ethyl-2-[[4-[5-fluoro-1H-indol-3-y1]-3,6-dihydro-1[2H)-pyridinyl]methyl]-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

L14 ANSWER 12 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 474544-57-5 CAPLUS
CN 7H-1,4-Dioxino(2,3-e]indole, 2-[[4-(5-fluoro-1H-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro- (CA INDEX NAME)

RN 474544-59-7 CAPLUS
CN 7H-1,4-Dioxino[2,3-e]indole, 2-[[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl]-8-ethyl-2,3-dihydro- (CA INDEX NAME)

L14 ANSWER 12 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474544-60-0 CAPLUS
7H-1,4-Dioxino[2,3-e]indole, 8-ethyl-2-[[4-(5-fluoro-1H-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl}methyl]-2,3-dihydro- (CA INDEX NAME)

L14 ANSWER 13 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

The title compds. [I; R1, R4-R6, R8 = H, OH, halo, etc.; R2, R3 = H, alkyl, halo, OH, CN, NH2; R7 = H, alkyl; Z = CR8, N; n = 0-2], useful for the treatment of depression and other diseases such as obsessive compulsive disorder, panic attacks, generalized anxiety disorder, social anxiety disorder, sexual dysfunction, eating disorders, obesity, ctive

anxiety disorder, sexual dysfunction, eating disorders, obesity, addictive disorders caused by ethanol or cocaine abuse and related illnesses, were prepared Thus, reacting (2R)-2,3-dihydro[1,4]dioxino[2,3-f]quinoxalin-2-ylmethyl 4-methylbenzenesulfonate (multi-step synthesis given) with 5-fluoro-3-(1,2,3,6-tetrahydro-4-pyridinyl)-lH-indole afforded 74% (S)-II which showed Ki of 17.72 MM against 5-HTIA receptor binding.

IT 474607-96-0P 474608-09-9P 474608-01-0P 474608-03-P 474608-00-9P 474608-09-P 474608-01-0P 474608-08-P 474608-06-5P 474608-01-0P RI-PRC (Phermacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(Uses)

(preparation of antidepressant azaheterocyclylmethyl derivs. of 2,3-dihydro-1,4-dioxino[2,3-f]quinoxaline)

RN 474607-96-0 CAPJUS

CN 1,4-Dioxino[2,3-f]quinoxaline,
2-[4-(5-fluoro-1H-indol-3-yl)-3,6-dihydro1(2H)-pyridinyl]methyl]-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

L14 ANSWER 13 OF 25 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2002:849645 CAPLUS OCCUMENT NUMBER: 137:353067

137:353067
Preparation of antidepressant azaheterocyclylmethyl derivatives of 2,3-dihydro-1,4-dioxino[2,3-f]quinoxaline
Gross, Jonathan Laird: Stack, Gary Paul Wyeth, John, and Brother Ltd., USA PCT Int. Appl., 33 pp.
CODEN: PIXND2
Patent
English TITLE:

INVENTOR (S):

PATENT ASSIGNEE(S): SOURCE: /

DOCUMENT TYPE: LANGUAGE: English 2

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PAT	ENT I	NO.			KIN)	DATE		i	APP	LICAT	ION	NO.		D	ATE		
											2002-							
	2002										2002-	0312	039		- 2	0020	423	
#0										RR	, BG,	RD	BY	87	Ch	CN	CN	
											, EE,							
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								ZM,			,,	,	,	,	,	,	,	
	RW:									SZ	, TZ,	UG.	ZM.	ZW.	AT.	BE.	CH.	
											, IT,							
											, GW,							
CA	CA 2445581 AU 2002256334						2002	1107		CĂ.	2002-	2445	581	,	2	0020	423	
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EΡ	1381	614			В1	2006	0802							20020423				
											, IT,							
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL	, TR							
CN	1503	801			A		2004	0609		CN	2002- 2002-	8086	79		2	0020	423	
BR	2002	0093	42		А		2004	0615	- 1	BR	2002-	9342			2	0020	423	
JP	2004	5275	63		T		2004	0909		JP	2002-	5854	42		2	0020	423	
AT	3349	89			т		2006	0815	i	ΑT	2002-	7257	87		2	0020	423	
ES	2269	67B			Т3		2007	0401	- 1	ES.	2002-	2725	787		2	0020	423	
MX	2003	PA09	B26		A		2005	0307		MX	2002- 2002- 2002- 2002-	PA98	26		2	0031	024	
PRIORITY	APP	LN.	INFO	. :					1	US	2001-	2864	38 P		P 2	0010	426	
											2002-							

OTHER SOURCE(S):

MARPAT 137:353067

L14 ANSWER 13 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474607-97-1 CAPLUS

1,4-Dioxino(2,3-f)quinoxaline, 2-[[3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-pyridinyl]methyl)-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

474607-98-2 CAPLUS 1,4-Dioxino[2,3-f]quinoxaline, 2-([3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl)methyl}-2,3-dihydro-8,9-dimethyl-, (2S)- (CA INDEX NAME)

L14 ANSWER 13 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 474607-99-3 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoxaline,
2-[[4-(5-fluoro-1H-indol-3-yl)-3,6-dihydro1(2H)-pyridinyl]methyl]-2,3-dihydro-8,9-dimethyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 474608-00-9 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoxaline, 2-[[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl]-8,9-diethyl-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

L14 ANSWER 13 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 474608-06-5 CAPLUS
CN 1,4-0ioxino[2,3-f]quinoxaline, 2-[[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl]-2,3-dihydro- (CA INDEX NAME)

RN 474608-07-6 CAPLUS
CN 1,4-Dioxino{2,3-f}quinoxaline, 2-[[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)pyridinyl]methyl]-2,3-dihydro-8,9-dimethyl- (CA INDEX NAME)

L14 ANSWER 13 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 474608-01-0 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoxaline,
8,9-diethyl-2-[[4-(5-fluoro-lH-indol-3-y1)3,6-dihydro-1(2H)-pyridinyl)methyl]-2,3-dihydro-, (2S)- (CÁ INDEX NAME)

Et N

Absolute stereochemistry.

RN 474608-05-4 CAPLUS CN 1,4-Dioxino{2,3-f]quinoxaline, 2-[[4-5-fluoro-11+-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro- (CA INDEX NAME)

L14 ANSWER 13 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 474608-08-7 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoxaline,
2-[{4-(5-fluoro-ll+indol-3-yl)-3,6-dihydro1(2H)-pyridinyl]methyl]-2,3-dihydro-8,9-dimethyl- (CA INDEX NAME)

RN 474608-09-8 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoxaline, 2-[{3,6-dihydro-4-(lH-indol-3-yl)-1(2H}-pyridinyl]methyl}-8,9-diethyl-2,3-dihydro- (CA INDEX NAME)

L14 ANSWER 13 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 474608-10-1 CAPLUS CN 1,4-Dioxino[2,3-f]quinoxaline, 8,9-diethyl-2-[[4-(5-fluoro-lH-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro- (CA INDEX NAME)

ANSWER 14 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) induced psychoses and dyskinesias, Tourette's syndrome and hyperprolactinemia and in the treatment of drug addiction such as the addiction to ethanol, nicotine or cocaine and related illnesses, were prepd. Thus, hydrogenation of (8S)-8-(azidomethyl)-7,8-dihydro[1,4]dioxino[2,3-g][1,3]benzoxazol-2(3H)-one (multi-step synthesis given) afforded 68% (S)-I.HCl [R1 = H; Z = NH2) which showed IC50 of 3.7 nM against D2 receptor binding.
74391-25-99 747391-38-3P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of antipsychotic aminomethyl derivs. of

(Uses)
(preparation of antipsychotic aminomethyl derivs. of
7,8-dihydro-3H-1,6,9trioxa-3-aza-cyclopenta(a)naphthalen-2-one)
RN 474391-26-9 CAPLUS
CN (1,4)Dioxino[2,3-g]benzoxazol-2(3H)-one,
8-[3,6-dihydro-4-(1H-indol-3-yl)1(2H)-pyridinyl)methyl)-7,8-dihydro-, (8S)- (CA INDEX NAME)

Absolute stereochemistry.

474391-38-3 CAPLUS
[1,4]Dioxino[2,3-g]benzoxazol-2(3H)-one,
3,6-dihydro-4-(1H-indol-3-yl)1(2H)-pyridinyl}methyl]-7,8-dihydro- (CA INDEX NAME)

L14 ANSWER 14 OF 25 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2002:849644 CAPLUS COPYRIGHT 2007 ACS ON STN 137:353042 Preparation of application of

137:353042
Preparation of antipsychotic aminomethyl derivatives of 7,8-dihydco-3H-1,6,9-trioxa-3-aza-cyclopenta[a]naphthalen-2-one Stack, Gary Paul; Tran, Megan Wyeth, John, and Brother Ltd., USA PCT Int. Appl., 36 pp. CODEN: PIXMD2
Patent
English

INVENTOR (5): PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE: English 1

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE WO 2002088142 A1 20021107 WC 2002-US13419 20020426
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MM, MM, MX, MZ, NO, NZ, OM, PH,
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
UA, UG, UZ, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MM, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GG, GM, ML, MR, NE, SN, TD, TG
US 2003073697 A1 20030417 US 2002-259054 20020425

US 6800648 AU 2002259054 20021111 AU 2002-259054 US 2001-286565P 20020426

PRIORITY APPLN. INFO.: P 20010426 WO 2002-US13419 W 20020426

OTHER SOURCE(S): MARPAT 137:353042

The title compds. [I; Rl = H, halo, CN, etc.; Z = (un)substituted piperazino, piperidino, 3,6-dihydro-2H-pyridin-1-yl, etc.], useful for treatment of disorders of the dopaminergic system, such as achizophrenia, schizoaffective disorder, bipolar disorder, Parkinson's disease, L-DOPA

L14 ANSWER 14 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE REFERENCE COUNT:

FORMAT

L14 ANSWER 15 OF 25 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2002:849642 CAPLUS DOCUMENT NUMBER: 137:353040 PREPARATION

137:353040
Preparation of antidepressant azaheterocyclylmethyl derivatives of 7,8-dihydro-1,6,9-trioxa-3-aza-cyclopenta(a)naphthalene
Tran, Megan; Stack, Gary Paul
Wyeth, John, and Brother Ltd., USA
PCT Int. Appl., 37 pp.
CODEN: PIXXD2

INVENTOR (S):

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: Patent LANGUAGE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 2002-US13117 W 20020425

OTHER SOURCE(S):

MARPAT 137:353040

L14 ANSWER 15 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 474622-49-6 CAPLUS
CN [1,4]Dioxino[2,3-g]benzoxazole,
8-[[4-(5-fluoro-lH-indol-3-yl)-3,6-dihydro1(2H)-pyridinyl]methyl]-7,8-dihydro-2-methyl-, (8S)- (CA INDEX NAME)

Absolute stereochemistry.

474622-50-9 CAPLUS [1,4]Dioxino[2,3-g]benzoxazole, 8-[[3,6-dihydro-4-(1H-indol-3-yi)-1(2H)-pyridinyl]methyl]-7,8-dihydro-2-methyl-, (8S)- (CA INDEX NAME)

Absolute stereochemistry.

L14 ANSWER 15 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

The title compds. [I; R1-R5, R7 = H, halo, CN, etc.; R6 = H, alkyl; Z = CR7, N; n = 0-2], useful for the treatment of depression and other diseases such as obsessive compulsive disorder, panic attacks, realized.

tarized anxiety disorder, social anxiety disorder, sexual dysfunction, eating disorders, obesity, addictive disorders caused by ethanol or cocaine

unsorders, obesity, addictive disorders caused by ethanol or cocaine end related illnesses, were prepared E.g., a multi-step synthesis of (S)-II, starting from 5-nitroqualacol and allyl bromide, which showed Ki of 4.00 nM in test on 5-HT transporter affinity, was given.

474622-48-5P 474622-49-6P 474622-50-9P
474622-51-0P 474622-55-4P 474622-55-2P
474622-53-P 474622-55-4P 474622-55-4P
474622-52-9P 474622-60-1P 474622-61-2P
474622-62-P 474622-63-4P 474622-64-5P
474622-65-6P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
[preparation of antidepressant azabetarcount of the starting of

(Uses)
(preparation of antidepressant azaheterocyclylmethyl derivs. of
7,8-dihydro-1,6,9-trioxa-3-aza-cyclopenta(a)naphthalene)
474622-48-5 CAPLUS
(1,41Dioxino[2,3-q]benzoxazole, 8-[[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl)methyl]-7,8-dihydro-, (8S)- (CA INDEX NAME)

L14 ANSWER 15 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474622-51-0 CAPLUS

NN 14-10dole-5-carbonitrile,
3-[1-[[(8S)-7,8-dihydro-2-methyl[1,4]dioxino[2,3g]benzoxazol-8-yl]methyl]-1,2,3,6-tetrahydro-4-pyridinyl}- (CA INDEX NAME)

Absolute stereochemistry.

474622-52-1 CAPLUS
1H-Indole-5-carbonitrile,
-[[(88)-7,8-dihydro-2-methyl[1,4]dioxino[2,3g]benzoxazol-8-yl|methyl]-1,2,3,6-tetrahydro-4-pyridinyl]-,
(2E)-2-butenedioate (1:2) (CA INDEX NAME)

CRN 474622-51-0 CMF C25 H22 N4 O3

L14 ANSWER 15 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 474622-53-2 CAPLUS
CN [1,4]Dioxino[2,3-g]benzoxezole,
8-[[4-(7-fluoro-lH-indol-3-y1)-3,6-dihydro1(2H)-pyridinyl]methyl]-7,8-dihydro-2-methyl-, (8S)- (CA INDEX NAME)

Absolute stereochemistry.

L14 ANSWER 15 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 474622-56-5 CAPLUS
CN [1,4]Dioxino[2,3-g]benzoxazole,
8-[(4-(5-chioro-1H-indol-3-y1)-3,6-dihydro1(2H)-pyridinyl]methyl]-7,8-dihydro-2-methyl-, (8S)-, (2E)-2-butenedioate
(2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 474622-55-4 CMF C24 H22 C1 N3 O3

Absolute stereochemistry.

CM 2

Double bond geometry as shown.

Page 78

L14 ANSWER 15 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 474622-54-3 CAPLUS
CN [1,4]Dioxino[2,3-q]benzoxazole,
8-[[4-(6-fluoro-lH-indol-3-yl)-3,6-dihydro1(2H)-pyridinyl]methyl}-7,8-dihydro-2-methyl-, (8S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 474622-55-4 CAPLUS CN [1,4]Dioxino[2,3-g]benzoxezole, 8-{[4-(5-chloro-1H-indol-3-y1)-3,6-dihydro-1(2H)-pyridinyl]methyl]-7,8-dihydro-2-methyl-, (8S)- (CA INDEX NAME)

Absolute stereochemistry.

L14 ANSWER 15 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

HO2C E CO2H

474622-59-8 CAPLUS [1,4]Dioxino[2,3-g]benzoxazole, 8-[[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl]-7,8-dihydro- (CA INDEX NAME)

RN 474622-60-1 CAPLUS
CN [1,4|Dioxino[2,3-g|benzoxazole,
8-[[4-(5-fluoro-lH-indol-3-yl)-3,6-dihydro1(2H)-pyridinyl)methyl}-7,8-dihydro-2-methyl- (CA INDEX NAME)

474622-61-2 CAPLUS [1,4]Dioxino[2,3-q]benzoxazole, 8-[(3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-pyridiny]|methyl]-7,8-dihydro-2-methyl- (CA INDEX NAME)

L14 ANSWER 15 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN CN 474622-62-3 CAPLUS 4/4022-02-3 CAPLUS

HF-Indole-5-carbonitrile, 3-[1-[(7,8-dihydro-2-methyl[1,4]dioxino[2,3-g]benzoxazol-8-yl)methyl]-1,2,3,6-tetrahydro-4-pyridinyl)- (CA INDEX NAME)

RN 474622-63-4 CAPLUS
CN [1,4]Dioxino[2,3-g]benzoxazole,
8-[[4-(7-fluoro-1H-indol-3-yl)-3,6-dihydro1(2H)-pyridinyl]methyl]-7,8-dihydro-2-methyl- (CA INDEX NAME)

L14 ANSWER 15 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L14 ANSWER 15 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 474622-64-5 CAPLUS RN 474622-64-5 CAPLUS
CN [1,4]Dioxino(2,3-g]benzoxazole,
8-[4-(6-fluoro-lH-indol-3-yl)-3,6-dihydro1(2H)-pyridinyl]methyl]-7,8-dihydro-2-methyl- (CA INDEX NAME)

RN 474622-65-6 CAPLUS
CN [1,4|Dloxino[2,3-g]benzoxazole,
8-{[4-(5-c-hloro-1H-indol-3-yl)-3,6-dihydro1(2H)-pyridinyl]methyl]-7,8-dihydro-2-methyl- (CA INDEX NAME)

L14 ANSWER 16 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2002:849639 CAPLUS DOCUMENT NUMBER: 137:353039 Preparation of antidepresser

137:353039
Preparation of antidepressant azaheterocyclylmethyl derivatives of 1,4,5-trioxa-phenanthrene
Tran, Megan: Stack, Gary Paul
Wyeth, John, and Brother Ltd., USA
PCT Int. Appl., 27 pp.
CODEN: PIXXD2
Patent
English

INVENTOR(S):
PATENT ASSIGNEE(S):
SOURCE:

English 2

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

AZ 20021107 WO 2002-US13447 20020429
A3 20030320
AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, LU, MA, MD, MG, MK, NN, MM, MX, MZ, NO, NZ, OM, PH, RV, SP, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, VN, YU, ZA, ZM, ZW
LS, MM, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, CG, CI, CM, GA, GN, GO, GW, MI, MR, NE, NS, TD, TG
B 20040601 TM 2002-901108669 20020426
A1 20021111 AU 2002-90130529 20020429 PATENT NO. WO 2002088136 WO 2002088136 2002088136
W: AE, AG, AL,
CO, CR, CU,
GM, HR, HU,
LS, LT, LU,
PL, PT, RO,
UA, UG, UZ,
RW: GH, GM, KE,
CY, DE, DK,
SF, BJ, CF,
589316 TW 589316 AU 2002303529 PRIORITY APPLN. INFO.: US 2001-287448P P 20010430

WO 2002-US13447

W 20020429

OTHER SOURCE(S): MARPAT 137:353039

L14 ANSWER 16 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

AB The title compds. [I: R1, R3-R5, R7 = H, halo, CN, etc.; R2, R6 = H, alkyl; Z = CR7, N; X = O, S, H2, F2; n = 0-2}, useful for the treatment

of diseases such as depression (including but not limited to major

diseases such as depression (Intravally Section 2014) depressive disorder, childhood depression and dysthymia), anxiety, panic disorder, post-traumatic stress disorder, premenstrual dysphoric disorder attention deficit disorder (with and without hyperactivity), obsessive compulsive disorder (including trichotillomania), social anxiety disorder, generalized anxiety disorder; obesity, eating disorders such as anorexia nervosa, bulimia nervosa, vasomotor flushing, cocaine and alc. addiction, sexual dysfunction and related illnesses, were prepared E.g., a

sexual dysfunction and related illnesses, were prepared E.g., a multi-step synthesis of (8)-II, starting from 2',3',4'-trihydroxyacetophenone and (R)-glycidyl tosylate, which showed Ki of 2.74 mM in test for 5-HT transporter affinity, was given.

17 474551-68-19 474551-19-8 P 474551-73-0P 474551-63-19 474551-93-19 P 474551-97-8P RI: PRC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(Uses)
(preparation of antidepressant azaheterocyclylmethyl derivs. of 1,4,5-trioxa-phenanthrene)
RN 474551-68-3 CAPIUS
CN 7H-Pyrano[2,3-f]-1,4-benzodioxin-7-one,
2-[(4-(5-fluoro-lH-indol-3-y-l)-3,6-dihydro-1(2H)-pyridinyl)methyl)-2,3-dihydro-, (2S)-, (2E)-2-butenedioate

L14 ANSWER 16 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 474551-73-0 CAPLUS
CN 7H-Pyrano[2,3-f]-1,4-benzodioxin-7-one,
2-{{3,6-dihydro-4-(H-indol-3-y1)1{2H}-pyridinyl}methyl]-2,3,8,9-tetrahydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

Page 80

L14 ANSWER 16 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (1:1) (9C1) (CA INDEX NAME) (Continued)

Absolute stereochemistry.

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

474551-71-8 CAPLUS
1H-Indole, 5-fluoro-3-[1,2,3,6-tetrahydro-1-[[{2S}]-2,3,8,9-tetrahydro-7Hpyrano[2,3-f]-1,4-benzodioxin-2-yl]methyl]-4-pyridinyl]-, ethanedioate
([1:1] (CA INDEX NAME)

CM 1

CRN 474551-70-7 CMF C25 H25 F N2 O3

Absolute stereochemistry.

L14 ANSWER 16 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474551-76-3 CAPLUS

CN lH-Indole,
3-[1,2,3,6-tetrahydro-1-[[(2S)-2,3,8,9-tetrahydro-7H-pyrano(2,3[-1,4-benzodioxin-2-yl]methyl]-4-pyridinyl]-, ethanedioate (1:1) (CA INDEX NAME)

CM 1

CRN 474551-75-2 CMF C25 H26 N2 O3

Absolute stereochemistry.

CM 2

144-62-7 C2 H2 O4

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RN 474551-89-8 CAPLUS
CN 7H-Pyrano[2,3-f]-1,4-benzodioxin-7-one,
2-[{4-(5-fluoro-lH-indol-3-yl)-3,6dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro- (CA INDEX NAME)

L14 ANSWER 16 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474551-91-2 CAPLUS
1H-Indole, 5-fluoro-3-{1,2,3,6-tetrahydro-1-[{2,3,8,9-tetrahydro-7H-pyrano[2,3-f]-1,4-benzodioxin-2-yl)methyl}-4-pyridinyl}- (CA INDEX NAME)

RN 474551-92-3 CAPLUS
CN 7H-Pyrano[2,3-f]-1,4-benzodioxin-7-one,
2-[[3,6-dihydro-4-(1H-indol-3-y1)1(2H)-pyridinyl]methyl]-2,3,8,9-tetrahydro- (CA INDEX NAME)

L14 ANSWER 16 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474551-97-8 CAPLUS
1H-Indole, 3-[1,2,3,6-tetrahydro-1-[(2,3,8,9-tetrahydro-7H-pyrano[2,3-f]-1,4-benzodioxin-2-yl)methyl]-4-pyridinyl]- (CA INDEX NAME)

L14 ANSWER 17 OF 25 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2002:849638 CAPLUS COPYRIGHT 2007 ACS ON STN 2002:849638 CAPLUS CAPLUS

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		ACC. INFOR	NUM.	COU														
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	BR	2002 2794 2004	0093	43		А		2004	0615		BR 2	002-	9343			2	0020	424
	AT	2794	15			т		2004	1015		AT 2	002-	7289	47		2	0020	424
	JP	2004	5322	36		т		2004	1021		JP 2	002-	5854	34		2	0020	424
	ES	2229	138			т3		2005	0416	,	ES 2	002-	272R	947			0020	424
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WO 2002-US12831

OTHER SOURCE(S): MARPAT 137:353038

w 20020424

(25)

L14 ANSWER 17 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)

11

The title compds. [I; Rl, R3-R5, R7 = H, halo, CN, etc.; Y = CO, C(R2)2 and Z = CH2, (CH2)2, CH:CH, NR2; or Y and Z, taken together, form CR2:CH, N:CR2, CR2:N; R2, R6 = H, alkyl; X = CR7, N; n = 0-2), useful for the treatment of depression such as obsessive compulsive disorder, panic attacks, generalized anxiety disorder, social anxiety disorder, sexual dysfunction, eating disorders, obesity, addictive disorders caused by ethanol or cocaine abuse and related illnesses, were prepared E.g., a Sacep synthesis of (S)-I1, starting from -(-7-hydroxy-2,3-dihydro-1,4-benzodioxin-2-y1)methanol and 2,3-dichloro-1-propene, which showed Ki of 14.07 nM against 5-HT1A receptor binding, was given. 474621-95-97 474621-96-09 474621-97-1P 474622-19-99-39 474622-16-PP 474622-119-99-39 474622-16-PP 474622-19-99 474622-19-9P RI: PRC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of antidepressant azaheterocyclylmethyl derivs. of oxaheterocycle-fused-[1,4]-benzodioxans) 474621-59-9 CAPLUS (Lice) (CA INDEX NAME)

Absolute stereochemistry.

DOCUMENT NUMBER: TITLE: Preparation of antidepressant azaheterocyclylmethyl derivatives of oxaheterocycle-fused-[1,4]-benzodioxans INVENTOR(S): Stack, Gary Pa v|-penzodioxam;
Stack, Gary Paul; Gao, Hong; Gildersleeve, Elizabeth
Suzanne
Wyeth, John, and Brother Ltd., USA
PCT Int. Appl., 35 pp.
CODEN: PIXED2 PATENT ASSIGNEE(S): SOURCE: DOCUMENT TYPE: Patent FAM PAT PRI

L14 ANSWER 17 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474621-96-0 CAPLUS
1H-Indole, 3-{1,2,3,6-tetrahydro-1-{{(2S}-2,3,8,9-tetrahydrofuro{3,2-f}-1,4-benzodioxin-2-yl}methyl}-4-pyridinyl}- (CA INDEX NAME)

RN 474621-97-1 CAPLUS
CN 1H-Indole,
3-[1-[([2S)-2,3-dihydrofuro[3,2-f]-1,4-benzodioxin-2-yl]methyl]1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX NAME)

L14 ANSWER 17 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

RN 474622-00-9 CAPLUS
CN 1H-Indole,
5-fluoro-3-[1,2,3,6-tetrahydro-1-[[(2S)-2,3,9,10-tetrahydro-8Hpyrano[3,2-f]-1,4-benzodioxin-2-yl]methyl]-4-pyridinyl]-,
(2E)-2-butenedioate (2:1) (CA INDEX NAME)

CM 1

CRN 474621-99-3 CMF C25 H25 F N2 O3

Absolute stereochemistry

CM 2

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L14 ANSWER 17 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474621-98-2 CAPLUS 1H-Indole, 3-[1,2,3,6-tetrahydro-1-[((28)-2,3,9,10-tetrahydro-8H-pyrano[3,2-f]-1,4-benzodioxin-2-yl]methyl]-4-pyridinyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 474621-99-3 CAPLUS
CN 1H-Indole,
5-fluoro-3-[1,2,3,6-tetrahydro-1-[{{2S}-2,3,9,10-tetrahydro-8H-pyrano[3,2-f]-1,4-benzodioxin-2-yl}methyl]-4-pyridinyl]- (CA INDEX NAME)

Absolute stereochemistry.

L14 ANSWER 17 OF 25 CAPLUS COPYRIGHT 2007 ACS ON STN (Continued)

Double bond geometry as shown.

474622-14-5 CAPLUS
1H-Indole, 3-{1-{(2,3-dihydro-8-methylfuro[3,2-f]-1,4-benzodioxin-2-yl)methyl}-1,2,3,6-tetrahydro-4-pyridinyl}- (CA INDEX NAME)

474622-15-6 CAPLUS
1H-Indole, 3-[1,2,3,6-tetrahydro-1-[(2,3,8,9-tetrahydrofuro[3,2-f]-1,4-benzodioxin-2-yl)methyl]-4-pyridinyl}- (CA INDEX NAME)

474622-16-7 CAPLUS
1H-Indole, 3-[1-[(2,3-dihydrofuro[3,2-f]-1,4-benzodioxin-2-y1)methyl]-1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX NAME)

L14 ANSWER 17 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474622-17-8 CAPLUS

N 1H-Indole,
3-[1,2,3,6-tetrahydro-1-[(2,3,9,10-tetrahydro-8H-pyrano(3,2-f)-1,4-benzodioxin-2-yl)methyl]-4-pyridinyl]- (CA INDEX NAME)

474622-18-9 CAPLUS
1H-Indole, 5-fluoro-3-{1,2,3,6-tetrahydro-1-{{2,3,9,10-tetrahydro-8H-pyrano{3,2-f}-1,4-benzodioxin-2-yl)methyl}-4-pyridinyl}- (CA INDEX NAME)

L14 ANSWER 18 OF 25
ACCESSION NUMBER:
DOCUMENT NUMBER:
171353036
Preparation of antipsychotic aminomethyl derivatives of 7,8-dihydro-3H-6,9-dioxa-2,3-diaza-cyclopenta[a]naphthalene
INVENTOR(S):
SOURCE:
DOCUMENT TYPE:

CAPPUS COPYRIGHT 2007 ACS on STN
2002:849636 CAPLUS
17353036
Preparation of antipsychotic aminomethyl derivatives of 7,8-dihydro-3H-6,9-dioxa-2,3-diaza-cyclopenta[a]naphthalene
Stack, Gary Paul; Tran, Megan
Myeth, John, and Brother Ltd., USA
PCT Int. Appl., 38 pp.
CODEN: PIXXD2
Patent

DOCUMENT TYPE:

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: English 1

PATENT NO. DATE KIND APPLICATION NO. DATE WO 2002089133
W: AE, AG, AI
CG, CR, CL
GM, HR, HL
LS, LT, LL
PL, PT, RC
UA, UG, UE
RW: GH, GM, KE
CY, DE, DP
US 2002183331
US 680641
AU 2002208491
PRIORITY APPLN. INFO.: AL, CU, HU, LU, RO, UZ, KE, DK, CF, AU 2002-308491 US 2001-286568P 20020426 P 20010426 WO 2002-US13284 W 20020426

OTHER SOURCE(S):

MARPAT 137:353036

AB The title compds. [I; Rl = H, halo, CN, etc.; R2 = H, OH, halo, etc.; Z = (un) substituted piperazino, piperidino, etc.], useful for treatment of disorders of the dopaminerpic system, such as schizophrenia, schizoaffective disorder, bipolar disorder, Parkinson's disease, L-DOPA induced psychoses and dyskinesias, Tourette's syndrome and hyperprolactinemia and in the treatment of drug addiction such as the addiction to ethanol, nicotine or cocaine and related illnesses, were prepared Thus, reacting [2R]-2.3-dihydro-7H-[1,4]dioxino[2,3-e]indazol-2-

L14 ANSWER 17 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L14 ANSWER 18 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
ylmethyl 4-methylbenzenesulfonate (multi-step prepn. given) with PhCH2NH2
in DMSO afforded 84% (s)-I [R], RZ = H; Z = NHCH2Ph] which showed IC50 of
0.45 nM against DZ receptor binding.
IT 474383-10-3P 474383-12-5P 474383-13-6P
474383-14-7P 474383-22-8P 474383-24-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)

(preparation of antipsychotic aminomethyl derivs. of 7,8-dihydro-3H-6,9

dinydro-3H-5,9-dioxa-7,3-diaza-cyclopenta[a]naphthalene) 474383-10-3 CAPLUS 7H-1,4-Dioxino[2,3-e]indazole, 2-[{3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl}-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

474383-12-5 CAPLUS
7H-1,4-Dioxino[2,3-e]indezole, 2-[[3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-pyridinyl|methyl)-2,3-dihydro-, monohydrochloride, (2S)- (9CI) (CA INDEX NAME)

L14 ANSWER 18 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

• HC1

474383-13-6 CAPLUS
7H-1,4-Dioxino[2,3-e]indazole, 2-{[4-[(5-fluoro-1H-indol-3-yl)methyl]-1-piperidinyl]methyl]-2,3-dihydro-, (28)- (CA INDEX NAME)

Absolute stereochemistry.

474383-14-7 CAPLUS
7H-1,4-Dioxino[2,3-e]indazole, 2-[[4-[{5-fluoro-lH-indol-3-yl)methyl]-l-piperidinyl]methyl}-2,3-dihydro-, (2S}-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 474383-13-6

L14 ANSWER 18 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474383-24-9 CAPLUS
7H-1.4-Dioxino[2,3-e]indazole, 2-[[4-((5-fluoro-1H-indol-3-y1)methyl]-1-piperidinyl]methyl]-2,3-dihydro- (CA INDEX NAME)

REFERENCE COUNT:

FORMAT

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

L14 ANSWER 18 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN CMF C24 H25 F N4 O2 (Continued)

Absolute stereochemistry.

CM 2

CRN 144-62-7 CMF C2 H2 O4

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474383-23-8 CAPLUS
7H-1,4-Dioxino{2,3-e}indazole, 2-[[3,6-dihydro-4-{1H-indol-3-yl}-1{2H}-pyridinyl]methyl}-2,3-dihydro- (CA INDEX NAME)

L14 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2007 ACS ON STN

ACCESSION NUMBER: 2002:849634 CAPLUS
DOCUMENT NUMBER: 137:353034

PITLE: Preparation of antidepressant (SSRI) azaheterocyclymethyl derivatives of 7,8-dihydro-314-6,9-dioxa-1,3-diazacyclopenta[a]naphthalene

STACK, Gary Paul

Myeth, John, and Brother Ltd., USA PCT Int. Appl., 39 pp.
CODEN: PIXXD2

DOCUMENT TYPE: CODEN: PIXXD2
PATENT INFORMATION: 2 DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	W:	AE.	AG.	AL.	AM.	AT.	AU.	AZ.	BA.	BB.	BG.	BR.	BY.	BZ.	CA.	CH.	CN.
																•	
	RW:	GH,	GM,	KE,	LS,	MW.	MZ.	SD,	SL.	SZ.	TZ.	UG,	ZM.	ZW.	AT.	BE.	CH.
CA	2445																
	WO 2002088131 W: AE, AG, CO, CR, GM, HR, LS, LT, PL, PT, UA, UG, CY, DE, BF, BJ, CA 2445552 AU 2002258988 EP 1401839 R: AT, BE, 1E, SI, BR 2002099408 JP 2004527561 CN 1535274 AT 304016 ES 2247327 MX 20037A09828																
	PATENT NO. WO 2002088131 W: AE, AG, CO, CR, GM, HR, LS, LT, PL, PT, UA, UG, RW: GH, GM, CY, DE, BF, BJ, CA 2445552 AU 2002259988 EP 1401839 EP 1401839 EP 1401839 EP 3401839 EP 3401839 EP 1401839 EP 310352561 DR 2002009408 JP 2004527561 CN 1535274 AT 304016 ES 2247327 MX 2003PA09928 LORITY APPLN. INFO.																
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										GR.	IT.	LI.	LU.	NI.	SE.	MC.	PT.
		TP	2 T	LT	LV	FT	PO.	MV	CV	n t	TD						
BR	2002	00941	9.0	-	A	,	2004	0706		BR 2	002-	9408			2	0020	423
JP	2004	5275	51		T		2004	0909		JP 2	002~	5854	30		2	0020	423
CN	1535	274			Ā		2004	1006		CN 2	2002-	8098	17		2	0020	423
AT	3040	16			т		2005	0915	- 4	AT 2	002-	7289	6B		2	0020	423
ES	2247	327			T3		2006	0301	-	ES 2	002-	2728	968		2	0020	423
MX	2003	PA091	928		Α		2005	0307	- 1	MIX 2	2003-	PA98	28		2	0031	024
											001-						
										WO 2	002-	US 12	993	1	W 2	0020	423

OTHER SOURCE(S):

MARPAT 137:353034

L14 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

The title compds. [I; Rl-R5, R8 = H, halo, CN, etc., R6, R7 = H, alkyl; Z = CR8, N; n = 0-2], useful for the treatment of depression and other diseases such as obsessive compulsive disorder, panic attacks,

talized anxiety disorder, social anxiety disorder, sexual dysfunction, eating disorders, obesity, addictive disorders caused by ethanol or cocaine

and related illnesses, were prepared Thus, reacting

abuse
and related illnesses, were prepared Thus, reacting
[(88)-2-trifluoromethy17,8-dihydro-31+6,9-dioxa-1,3-diaza-cyclopenta[a]naphthalen-8-yl]methy1
4-methylbenzenesulfonate (multi-step synthesis given) with
5-fluoro-3-(1,2,3,6-tetrahydro-4-pyridiny1)-1H-indole in DMSO afforded
(S)-II which showed Ki of 3.07 nM against 5-HT1A receptor binding.
17 474623-45-3-5P 474623-35-8P 474623-51-3P
474623-3-5-9 474623-35-9P 474623-57-1P
474623-61-5P 474623-35-9P 474623-67-1P
474623-60-3P 474623-373-9P 474623-77-3P
474623-90-0P 474623-373-9P 474624-05-0P
474623-90-0P 474624-02-7P 474624-05-0P
474624-05-1P 474624-07-2P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
(Uses)
(Uses)
(Uses)
7,8-dihydro-3H-6,9-dioxa-1,3-diazacyclopenta[a]naphthalene)
RN 474623-47-7 CAPLUS
CN 1H-[1,4]Dioxino[2,3-e]benzimidazole, 8-[(4-(5-fluoro-1H-indol-3-yl)-3,6-dihydro-1(2H)-pyridiny1)methyl)-7,8-dihydro-2-(trifluoromethyl)-, (88)-

L14 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

Double bond geometry as shown.

474623-51-3 CAPLUS
1H-{1,4}Dioxino[2,3-e]benzimidazole, 8-[[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl}-7,8-dihydro-2-(trifluoromethyl)-, (8S)- (CA

Absolute stereochemistry.

 $474623-53-5 \quad CAPLUS \\ 1H-[1,4]Dloxino[2,3-e]benzimidazole, 8-[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl]-7,8-dihydro-2-(trifluoromethyl)-, (8S)-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)$

CM 1

CRN 474623-51-3 CMF C24 H21 F3 N4 O2

Absolute stereochemistry.

L14 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (CA INDEX NAME) (Continued)

Absolute stereochemistry.

CRN 474623-47-7 CMF C24 H20 F4 N4 O2

Absolute stereochemistry.

L14 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

 $\begin{array}{lll} 474623-56-8 & CAPLUS \\ 1H-\{1,4]Dioxino\{2,3-e\}benzimidazole, & 8-\{\{4-\{6-fluoro-1H-indol-3-y1\}-3,6-dihydro-\{12H\}-pyridiny1\}methyl\}-7,8-dihydro-2-\{trifluoromethyl\}-7,(8S)-,\{2E\}-2-butenedioate & \{2:1\} & (9CI) & (CA INDEX NAME) \\ \end{array}$

1

CRN 474623-55-7 CMF C24 H20 F4 N4 O2

L14 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

но2с В со2н

 $\begin{array}{lll} 474623-59-1 & CAPLUS \\ 1H-[1,4]Dioxino[2,3-e]benzimidazole, 8-[\{3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-pyridinyl]methyl]-7,8-dihydro-2-methyl-, (8S)-, (2E)-2-butenedioate (1:1) [9CI] & (CA INDEX NAME) \\ \end{array}$

CM 1

CRN 474623-58-0 CMF C24 H24 N4 O2

Absolute stereochemistry.

L14 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

 $474623-64-8 \quad CAPLUS \\ 1H-[1,4]Dioxino[2,3-e]benzimidazole, 8-[[3,6-dihydro-4-{1H-indol-3-yl}-1(2H)-pyridinyl]methyl]-7,8-dihydro-1,2-dimethyl-, (8S)-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)$

CM 1

CRN 474623-61-5 CMF C25 H26 N4 O2

Absolute stereochemistry.

Double bond geometry as shown.

Page 86

L14 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

HO2C E CO2H

474623-61-5 CAPLUS
1H-[1,4]Dioxino[2,3-e]benzimidazole, 8-[[3,6-dihydro-4-{1H-indol-3-yl}-1{2H}-pyridinyl]methyl]-7,8-dihydro-1,2-dimethyl-, (8S)- (CA INDEX NAME)

L14 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) HO2C E CO2H

474623-67-1 CAPLUS
1H-[1,4]Dioxino[2,3-e]benzimidazole, 8-[[3,6-dihydro-4-{1H-indol-3-yl}-1(2H)-pyridinyl]methyl]-2-ethyl-7,8-dihydro-, (8S)- (CA INDEX NAME)

Absolute stereochemistry.

474623-69-3 CAPLUS
IH-[1,4]Dioxino[2,3-e]benzimidazole, 8-[[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl]-2-ethyl-7,8-dihydro-, (8S)-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 474623-67-1 CMF C25 H26 N4 O2

L14 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

 $\begin{array}{lll} 474623-73-9 & \text{CAPLUS} \\ 1\text{H-}[1,4] \text{Dioxino}[2,3-e] \text{benzimidazole,} & \$-[\{4-\{7-\text{fluoro-1H-indol-3-yl}\}-3,6-\text{dihydro-}[2H]-\text{pyridinyl}] \text{methyl}]-7,8-\text{dihydro-2-}(\text{trifluoromethyl})-, &\$-(\$-), \\ \{2\mathbb{E}\}-2-\text{butenedioste} & \{1:1\} & (\$-), & (\texttt{CA-INDEX-NAME}). \end{array}$

CRN 474623-72-8 CMF C24 H20 F4 N4 O2

Absolute stereochemistry.

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

L14 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

474623-93-3 CAPLUS
1H-[1,4]Dioxino[2,3-e]benzimidazole, 8-[{3,6-dihydro-4-{1H-indol-3-yl}-1(2H)-pyridinyl]methyl]-7,8-dihydro-2-(trifluoromethyl)- (CA INDEX NAME)

474623-96-6 CAPLUS
1H-[1,4]Dioxino[2,3-e]benzimidazole, 8-[[4-(6-fluoro-1H-indol-3-yl)-3,6-diydro-1(2H)-pyridinyl)methyl)-7,8-dihydro-2-(trifluoromethyl)- (CA INDEX NAME)

L14 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474623-77-3 CAPLUS $\begin{array}{lll} 474623-77-3 & \text{CAPLUS} \\ 1\text{H-}[1,4] \text{Dioxino}[2,3-e] \text{benzimidazole, } 8-[\{3,6-\text{dihydro-4-}\{1\text{H-indol-3-yl}\}-1(2\text{H-pridinyl}) - \{8\text{H-yl}\}-7,8-\text{dihydro-2-}(\text{pentafluoroethyl}\}-, \{8\text{S}\}-, \{2\text{E}\}-2-\text{butenedioate} & \{1:1\} & \{9\text{CI}\} & (\text{CA INDEX NAME}) \end{array}$

CRN 474623-76-2 CMF C25 H21 F5 N4 O2

Absolute stereochemistry.

2 CM

Double bond geometry as shown.

L14 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

474623-99-9 CAPLUS
1H-[1,4]Dioxino[2,3-e]benzimidazole, 8-[{3,6-dihydro-4-{1H-indol-3-y1}-1{2H}-pyridinyl]methyl]-7,8-dihydro-2-methyl- (CA INDEX NAME)

L14 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474624-05-0 CAPLUS
1H-[1,4]Dioxino[2,3-e]benzimidazole, 8-[[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl]-2-ethyl-7,8-dihydro- (CA INDEX NAME)

474624-06-1 CAPLUS
1H-[1,4]Dioxino[2,3-e]benzimidazole, 8-[[4-(7-fluoro-1H-indol-3-y1)-3,6-dihydro-1(2H)-pyridinyl)methyl]-7,8-dihydro-2-(trifluoromethyl)- (CA INDEX NAME)

L14 ANSWER 20 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:849632 CAPLUS
TITLE: 137:353058

FIRST ACCESSION NUMBER: 137:353058

RIVENTOR(S): 2002:849632 CAPLUS
ACCESSION NUMBER: 137:353058

Preparation of antidepressant azaheterocyclylmethyl derivatives of 2,3-dihydro-1,4-dioxino[2,3-f]quinazoline
Husbands, George Edward Morris; Stack, Gary Paul Myeth, John, and Brother Ltd., USA
PCT Int. Appl., 36 pp.
CODEN: PIXXD2

DOCUMENT TYPE: 2008: PIXXD2

DATENT THEOREMATION: 1

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATI	PATENT NO.						DATE				ICAT							
wo a	2002	0881	29		Al						002-				_	0020	423	
	W:	AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	вв,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
		co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	KZ,	LC,	LK,	LR,	
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,	
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,	
		UA,	UG,	UZ,	VN,	YU,	ZA,	ZM,	ZW									
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑT,	ΒE,	CH,	
		CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	IΕ,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	
		BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG	
AU 2	2002:	2527	09		A1		2002	1111	,	AU 2	2002-2	2527	09		2	0020	423	
US 2	2002	1833	41		A1		2002	1205	- 1	US 2	002-	1279	26		2	0020	423	
US (6656	947			B2		2003	1202										
EP :	1381	512			A1		2004	0121	1	EP 2	002-	7217	99		2	0020	423	
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR							
PRIORITY	APP	LN.	INFO	.:					ı	US 2	2001-	2865	73P		P 2	0010	426	
									1	WO 2	002-	JS 1 2	738		W 2	0020	423	

OTHER SOURCE(S): MARPAT 137:353058 L14 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474624-07-2 CAPLUS
1H-[1,4]Dioxino(2,3-e]benzimidazole, 8-[(3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-pyridinyl]methyl]-7,8-dihydro-2-(pentafluoroethyl)- (9CI) (CA

REFERENCE COUNT:

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L14 ANSWER 20 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

The title compds. [I: R1, R3-R5, R7 = H, OH, halo, etc.; R2 = H, OH,

The title compds. [I: R1, R3-R5, R7 = H, OH, halo, etc.; R2 = H, OH, b., ctc.; R6 = H, alkyl; Z = N, N-oxide; X = CR7, N; n = 0-2], useful for the treatment of depreassion and other diseases such as obsessive compulsive disorder, pank: attacks, generalized anxiety disorder, social anxiety disorder, sexual dysfunction, eating disorders, obesity, addictive disorders caused by ethanol or cocaine abuse and related illnesses, were prepared Thus, reacting [2R]-2,3-dihydro-1,4-dioxino[2,3-f]quinazolin-2-ylmethyl 4-methylbenrenesulfonate (multi-step synthesis given) with 5-fluoro-3-(1,2,3,6-tetrahydro-4-pyridinyl)-IH-indole in the presence of NaHCO3 in DMF/THF afforded 35 x [S)-II which showed Ki of 51.53 nM against 5-HT1A receptor binding.
474607-77-7P 474607-78-8P 474607-89-9P 474607-89-9P 474607-81-3P 474607-80-80-9P 474607-81-3P 474607-89-9P 474607-81-3P 474607-89-9P 474607-99-4P RE: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of antidepressant zasheterocyclylmethyl derivs. of 2,3-dihydro-1,4-dioxino[2,3-f]quinazoline) 474607-77-7 CABLUS 1,4-Dioxino[2,3-f]quinazoline, 14-(5-fluoro-1H-indol-3-yl)-3,6-dihydro-1,(28)-pyridinyl)methyl]-2,3-dihydro-, (2S)- (CA INDEX NAME)

L14 ANSWER 20 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

Absolute stereochemistry.

RN 474607-79-9 CAPLUS
CN 1,4-Dioxino{2,3-f}quinazoline, 2-[[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl}-2,3-dihydro-8-methyl-, 9-oxide, (2S)- (CA INDEX NAME)

Absolute stereochemistry

L14 ANSWER 20 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 474607-86-8 CAPLUS
CN 1,4-Dioxino[2,3-f]quinazoline,
2-[[44-5-fluoro-ll-indol-3-yl)-3,6-dihydro1(2H)-pyridinyl)methyl]-2,3-dihydro- (CA INDEX NAME)

RN 474607-87-9 CAPLUS
CN 1,4-Dioxino[2,3-f]quinazoline, 2-{[3,6-dihydro-4-(1H-indol-3-yl}-1{2H}-pyridinyl]methyl]-2,3-dihydro- (CA INDEX NAME)

L14 ANSWER 20 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 474607-80-2 CAPLUS
CN 1,4-Dioxino[2,3-f]quinazoline, 2-[[3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-pyridinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 474607-81-3 CAPLUS
CN 1,4-Dioxino[2,3-f]quinazoline, 2-[[3,6-dihydro-4-(lH-indol-3-yl)-1{2H}-pyridinyl]methyl]-8-ethyl-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

L14 ANSWER 20 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 474607-88-0 CAPLUS
CN 1,4-Dioxino[2,3-f]quinazoline, 2-[{3,6-dihydro-4-(lH-indol-3-yl)-1{2H}-pyridinyl}methyl]-2,3-dihydro-8-methyl-, 9-oxide (CA INDEX NAME)

RN 474607-89-1 CAPLUS
CN 1,4-Dioxino[2,3-f]quinazoline, 2-[{3,6-dihydro-4-(lH-indol-3-yl)-1(2H)-pyridinyl)methyl]-2,3-dihydro-8-methyl- (CA INDEX NAME)

L14 ANSWER 20 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

474607-90-4 CAPLUS
1,4-Dioxino[2,3-f]quinazoline, 2-[[3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-pyridiny1]methy1)-8-ethy1-2,3-dihydro- (CA INDEX NAME)

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

L14 ANSWER 21 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

The title compds. [I: Rl = H, OH, halo, etc.; R2-R4, R6 = H, halo, CN, etc.; R5 = H, alkyl: X = CR6, N: n = 0-2; Y = N, N-oxidel, useful for the treatment of depression, obsessive compulsive disorder, panic attacks, generalized anxiety disorder, social anxiety disorder, sexual userion.

generalized anxiety disorder, social anxiety disorder, sexual dysfunction,
eating disorders, obesity, addictive disorders caused by ethanol or cocaine abuse, and dysthymia, were prepared Thus, reacting 3-[1,2,3,6-tetrahydro-4-pyridyl)-H-H-indole with 2-bromo-3-[(ZS)-oxiranylmethoxy|pyridine (yield 71%) followed by cyclization of the intermediate afforded 52% [S)-II which showed Ki of 14.30 nM against 5-HT1A receptor binding.

IT 473996-88-8P 473996-68-9P 473996-70-2P 473996-71-3P 473996-71-3P 473996-81-5P 473996-82-6P 473996-75-7P 473996-81-5P 473996-82-6P 473996-83-PP TA3996-84-8P RI: PAC (Pharmacological activity); SPN (Synthetic preparation); USES (Uses)

(Uses)
(preparation of antidepressant azaheterocyclylmethyl derivs. of 1,4-dioxino(2,3-b)pyridine)
473996-68-8 CAPLUS
1,4-Dioxino(2,3-b)pyridine, 3-[[3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-pyridinyl)methyl)-2,3-dihydro-, (3S)- (CA INDEX NAME)

Absolute stereochemistry.

Page 90

L14 ANSWER 21 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:832806 CAPLUS
DOCUMENT NUMBER: 137:337898

ITITLE: derivatives of 1,4-dioxino[2,3-b]pyridine
INVENTOR(S): Tran, Megan; Stack, Gary Paul
Wyeth, John, and Brother Ltd., USA
POLUMENT TYPE: CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

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					A1 20021031													
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		LS,	LT,	LU,	LV,	ΜA,	MD,	MG,	ΜK,	MN,	MW,	ΜX,	ΜZ,	NO,	NZ,	OM,	PH,	
		PL,	PT,	RO,	Rυ,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,	
		UΑ,	UG,	UΖ,	VN,	Yυ,	ZA,	ZM,	ZW									
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑT,	ΒE,	CH,	
		CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	
		BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	G₩,	ML,	MR,	NE,	SN,	TD,	TG	
							US 2002-127923					2	0020	423				
	6656																	
	2002																	
	2004									US 2	003-	6611	82		2	0030	912	
	6987																	
RIORITY	APP	LN.	INFO	. :						US 2	001-	2863	01P		P 2	0010	425	
										US 2	002-	1279	23		A1 2	0020	423	

OTHER SOURCE(S): MARPAT 137:337898

L14 ANSWER 21 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RN 473996-69-9 CAPLUS
CN 1,4-Dioxino[2,3-bipyridine, 3-[[4-(5-fluoro-1H-indol-3-yl)-3,6-dihydro1(2H)-pyridinyl]methyl]-2,3-dihydro-, (3S)- (CA INDEX NAME)

Absolute stereochemistry.

473996-70-2 CAPLUS

hH-Indole-5-carbonitrile, 3-[1-[(38)-2,3-dihydro-1,4-dioxino[2,3-b]pyridin-3-y1]methyl)-1,2,3,6-tetrahydro-4-pyridinyl}- (CA INDEX NAME)

Absolute stereochemistry.

473996-71-3 CAPLUS

1,4-Dloxino[2,3-b]pyridine, 3-[[4-(6-fluoro-1H-indol-3-y1)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-, (3S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 473996-72-4 CAPLUS CN 1,4-Dioxino[2,3-b]pyridine, 3-[[3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-pyridiny]]methyl]-2,3-dihydro-, (3S)-, ethanedioate (1:1) (9CI) (CA INDEX

CM 1

L14 ANSWER 21 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN CRN 473996-68-8 CMF C21 H21 N3 O2 (Continued)

Absolute stereochemistry.

2 CM

CRN 144-62-7 CMF C2 H2 O4

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4 73996-73-5 CAPLUS 1,4-Dioxino[2,3-D]pyridine, 3-[(4-(5-fluoro-1H-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-, (3S)-, ethanedicate (2:1) (9CI)

CM 1

CRN 473996-69-9 CMF C21 H20 F N3 O2

Absolute stereochemistry.

L14 ANSWER 21 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN Absolute stereochemistry. (Continued)

CM 2

CRN 144-62-7 CMF C2 H2 O4

но- c- c- он

473996-81-5 CAPLUS
1,4-Dioxino[2,3-b]pyridine, 3-[(3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridiny]lmethyl]-2,3-dihydro- (CA INDEX NAME)

473996-82-6 CAPLUS 1,4-Dipxridine, 3-[[4-(5-fluoro-1H-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro- (CA INDEX NAME)

CAPLUS

47390-03-7 CAREUS
HH-Indole-5-carbonitrile, 3-[1-[(2,3-dihydro-1,4-dioxino[2,3-b]pyridin-3-yl)methyl]-1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX NAME)

L14 ANSWER 21 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN CRN 144-62-7 CMF C2 H2 O4 (Continued)

но-- с-- с-- он

473996-74-6 CAPLUS
1H-Indole-5-carbonitrile, 3-{1-[{(3S)-2,3-dihydro-1,4-dioxino[2,3-b]pyridin-3-y1]methyl]-1,2,3,6-tetrahydro-4-pyridinyl]-, ethanedioate (5:7) (CA INDEX NAME)

CM 1

CRN 473996-70-2 CMF C22 H20 N4 O2

Absolute stereochemistry.

CM 2

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473996-75-7 CAPLUS
1,4-Dioxino[2,3-b]pyridine, 3-[[4-(6-fluoro-1H-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-, (3S)-, ethanedioate (1:2) [9CI)

CM 1

L14 ANSWER 21 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

473996-84-8 CAPLUS
1,4-Dioxino[2,3-b]pyridine, 3-[[4-(6-fluoro-lH-indol-3-yl)-3,6-dihydro1(2H)-pyridinyl]methyl]-2,3-dihydro- (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L14 ANSWER 22 OF 25
ACCESSION NUMBER:
DOCUMENT NUMBER:
137:337896
Preparation of antidepressant azaheterocyclylmethyl derivatives of 2,3-dihydro-1,4-benzodioxane
Husbands, George Edward Morris; Stack, Gary Paul;
Mewshaw, Richard Eric; Cliffe, Ian Anthony
Wyeth, John, and Brother Ltd., USA
PCT Int. Appl., 34 pp.
CODEN: PIXXD2

DOCUMENT TYPE:

DOCUMENT TYPE: Patent English 2

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE WO 2002085896 WO 2002085896 20021031 WO 2002-US12843 20020423 A1 A8 WO 2002085896

WI AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LK, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, VU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MM, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GM, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2002258971

AI 20021105

AU 20022-258971

AI 20040121

EP 2002-728950

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRIORITY APPLN. INFO:

W 20010424 20021128

WO 2002-US12843 W 20020423

OTHER SOURCE(S): MARPAT 137:337896

L14 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

473993-80-5 CAPLUS
IN-Indole, 3-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-1,2,3,6-tetrahydro-4-pyridinyl]-5-fluoro- (CA INDEX NAME)

473993-81-6 CAPLUS
1,4-Benzodioxin-6-amine, 3-[[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl]-2,3-dihydro-, (3S)- (CA INDEX NAME)

Absolute stereochemistry.

473993-82-7 CAPLUS

1,4-Benzodioxin-6-amine, 2-[[3,6-dihydro-4-(1H-indol-3-y1)~1(2H)-pyridinyl]methyl)-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 473993-83-8 CAPLUS
CN 1H-Indole,
3-[1-[[(2S)-2,3-dihydro-8-methoxy-1,4-benzodioxin-2-y1]methyl]-

Page 92

L14 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

The title compds. [I; R1, R2 = H, halo, CN, etc.; R3-R5, R7 = H, halo,

The title compds. [I; Rl, R2 = H, halo, CN, etc.; R3-R5, R7 = H, halo, etc.; R6 = H, alkyl; X = CR7, N; n = 0-2], useful for the treatment of depression and other conditions such as obsessive compulsive disorder, panic attacks, generalized anxiety disorder, sexual dysfunction, eating disorders, addictive disorders caused by ethanol or cocaine abuse and related illnesses, were prepared Thus, reacting 2,3-dihydrobensol 11 lnesses, were prepared Thus, reacting 2,3-dihydrobensol 11 lnesses, were prepared Thus, reacting 2,3-dihydrobensol 10 DMF/THF afforded II which showed ki of 27.18 nM against 5-HTlA receptor binding.

473993-19-2P 473993-80-5P 473993-81-6P 473993-92-9P 473993-92-9P 473993-80-9P 473993-80-9P 473993-90-PP 473993-90-PP 473993-90-PP 473993-90-PP 473993-90-PP 473993-99-PP 473993-99-PP 473994-01-3P 473994-01-3P 473994-01-3P 473994-01-4P 473994-01-5P 473994-01-6P 473994-01-6P 473994-01-6P 473994-10-PP 47399

L14 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2007 ACS ON STN 1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX NAME) (Continued)

Absolute stereochemistry.

473993-84-9 CAPLUS

NN 4/393-94-9 GREDOS
Ch. 1,4-Benzodioxin-6-amine,
2-{[4-(5-fluoro-1H-indol-3-yl)-3,6-dlhydro-1(2H)pyridinyl]methyl]-2,3-dlhydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

473993-85-0 CAPLUS
1H-Indole-5-carbonitrile, 3-[1-[{(28}-2,3-dihydro-8-methoxy-1,4-benzodioxin-2-yl]methyl]-1,2,3,6-tetrahydro-4-pyridinyl]-,
monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

• HCl

L14 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RN 473993-86-1 CAPLUS
COPYRIGHT 2007 ACS on STN (Continued)
RN 473993-86-1 CAPLUS
benzodioxin-2-y1)methyl)-1,2,3,6-tetrahydro-4-pyridinyl)- (CA INDEX NAME)

Absolute stereochemistry.

RN 473993-87-2 CAPLUS
CN 1H-Indole,
3-{1-{(23)-2,3-dihydro-8-methoxy-1,4-benzodioxin-2-y}]methyl}1,2,3,6-tetrahydro-4-pyridinyl}-6-fluoro- (CA INDEX NAME)

Absolute stereochemistry.

473993-88-3 CAPLUS
1,4-Benzodioxin-5-carboxamide, 2-[[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl)-2,3-dihydro-, {2S}- (CA INDEX NAME)

Absolute stereochemistry.

L14 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

473993-92-9 CAPLUS
1H-Indole, 3-[1-[[(2S)-2,3-dihydro-8-methyl-1,4-benzodioxin-2-yl]methyl]-1,2,3,6-tetrahydro-4-pyridinyl]-5-fluoro- (CA INDEX NAME)

473993-93-0 CAPLUS 1H-Indole, 3-{1-[{2,3-dihydro-1,4-benzodioxin-2-yl}methyl}-1,2,3,6-tetrahydro-4-pyridinyl}-5-methoxy-, ethanedioate {1:1} (CA INDEX NAME)

CM 1

CRN 473993-79-2 CMF C23 H24 N2 O3

$$CH_2-N$$

L14 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 473993-69-4 CAPLUS
CN 1,4-Benzodioxin-5-carboxamide,
2-{(4-(5-fluoro-1H-indol-3-yl)-3,6-dihydro|{2H}-pyridinyl]methyl]-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

473993-90-7 CRPLUS | H-Indole, 3-[1-[[(2S)-8-fluoro-2,3-dihydro-1,4-benzodioxin-2-yl]methyl]-1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX NAME)

Absolute stereochemistry.

473993-91-8 CAPLUS

RN 4/393-31-0 GERBUS

1H-Indole,
3-[1-[(2S)-2,3-dihydro-7-methoxy-1,4-benzodioxin-2-y1]methyl]1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX NAME)

Absolute stereochemistry.

L14 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

473993-94-1 CAPLUS
1H-Indole, 3-[1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl)-1,2,3,6tetrahydro-4-pyridinyl)-5-fluoro-, ethanedioate (1:1) (CA INDEX NAME)

CM 1

CRN 473993-80-5 CMF C22 H21 F N2 O2

2 CM

CRN 144-62-7 CMF C2 H2 O4

473994-01-3 CAPLUS
1H-Indole, 3-[1-[[(25)-2,3-dihydro-8-methyl-1,4-benzodioxin-2-yl]methyl]12,3,6-tetrahydro-4-pyridinyl}-5-fluoro-, ethanedioate (1:1) (CA INDEX

CM 1

CRN 473993-92-9 CMF C23 H23 F N2 O2

L14 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

CRN 144-62-7 CMF C2 H2 O4

C-C-0H

473994-02-4 CAPLUS 1,4-Benzodioxin-6-amine, 2-[[3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-pyridinyl]methyl]-2,3-dihydro- (CA INDEX NAME)

473994-03-5 CAPLUS 1H-Indole, 3-[1-[(2,3-dihydro-8-methoxy-1,4-benzodioxin-2-yl)methyl]-1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX NAME)

RN 473994-04-6 CAPLUS
CN 1,4-Benzodioxin-6-amine,
2-{[4-{5-fluoro-1H-indol-3-yl}-3,6-dihydro-1{2H}-

L14 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 473994-09-1 CAPLUS
CN 1,4-Benzodioxin-5-carboxamide,
2-[{4-(5-fluoro-1H-indol-3-yl)-3,6-dihydro1(2H)-pyridinyl|methyl]-2,3-dihydro- (CA INDEX NAME)

473994-10-4 CAPLUS
1H-Indole, 3-[1-(40-fluoro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-1,2,3,6-tetrahydro-4-pyridinyl)- (CA INDEX NAME)

473994-11-5 CAPLUS
1H-Indole, 3-[1-[(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-y1)methyl]1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX NAME)

473994-12-6 CAPLUS
1H-Indole, 3-[1-[(2,3-dihydro-8-methyl-1,4-benzodioxin-2-yl)methyl]-1,2,3,6-tetrahydro-4-pyridinyl]-5-fluoro- (CA INDEX NAME)

Page 94

L14 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN pyridinyl]methyl]-2,3-dihydro- (CA INDEX NAME) (Continued)

473994-05-7 CAPLUS 1H-Indole-5-carbonitrile, 3-[1-[(2,3-dihydro-8-methoxy-1,4-benzodioxin-2-y1)methy1]-1,2,3,6-tetrahydro-4-pyridiny1]- (CA INDEX NAME)

RN 473994-06-8 CAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine,
3-[1-[12,3-dehydro-8-methoxy-1,4-benzodioxin-2-yl]methyl]-1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX NAME)

473994-07-9 CAPLUS
1H-Indole, 3-[1-{(2,3-dihydro-8-methoxy-1,4-benzodioxin-2-yl)methyl}-1,2,3,6-tetrahydro-4-pyridinyl}-6-fluoro- (CA INDEX NAME)

473994-08-0 CAPLUS
1,4-Benzodioxin-5-carboxamide, 2-{[3,6-dihydro-4-(1H-indo1-3-y1)-1(2M)-pyridiny1|methy1]-2,3-dihydro- (CA INDEX NAME)

L14 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

473994-14-8 CAPLUS 1,4-Benzodioxin-6-amine, 3-[{3,6-dihydro-4-(lH-indol-3-yl}-1(2H)-pyridinyl]methyl]-2,3-dihydro- (CA INDEX NAME)

ΙT

473993-95-2P 473993-96-3P 473993-97-4P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of antidepressant azaheterocyclylmethyl derivs. of 2,3-dihydro-1,4-benzodioxane) 473993-95-2 CAPLUS 1H-Indole, 3-[1-[(2S)-2,3-dihydro-7-nitro-1,4-benzodioxin-2-yl]methyl]-1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX NAME)

Absolute stereochemistry.

473993-96-3 CAPLUS
1H-Indole, 3-[1-[(2s)-2,3-dihydro-6-nitro-1,4-benzodioxin-2-yl]methyl]1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX NAME)

L14 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

473993-97-4 CAPLUS 1H-indole, 3-[1-f[(2S)-2,3-dihydro-6-nitro-1,4-benzodioxin-2-yl]methyl]-1,2,3,6-tetrahydro-4-pyridinyl]-5-fluoro- (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

Z697 B1 20041103 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR 2697 T 20041115 AT 2002-721325 20020312 2697 T 20050131 PT 2002-721325 20020312 0484 T3 20050501 ES 2002-2721325 20020312 3045542 A1 20030306 US 2002-228144 20020827 9915 B2 20030729 R: AT 281459 PT 1392697 ES 2230484 US 2003045542 US 6599915 PRIORITY APPLN. INFO .: US 2001-275564P P 20010314 US 2002-95505 A1 20020312 WO 2002-US7192 w 20020312

L14 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2002:716282 CAPLUS DOCUMENT NUMBER: 137:247706 Preparation of Title:

TITLE: Preparation of antidepressant azah derivatives of 2,3-dihydro-1,4-dioxino[2,3-f]quinoline
INVENTOR(\$): Tran, Megan; Stack, Gary Paul
PATENT ASSIGNEE(\$): Wyeth, John, and Brother Ltd., USA
SOURCE: PICT Int. Appl., 66 pp.
CODENT TYPE: PICKDE
PICKDEN PICKDE
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

KIND DATE

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO.

Preparation of antidepressant azaheterocyclylmethyl

APPLICATION NO.

DATE

OTHER SOURCE(S): MARPAT 137:247706

L14 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

The title compds. [I; R1 = H, OH, halo, CN, etc.; R2-R5, R7 = H, OH,

As The title compds. [I; Rl = H, OH, halo, CN, etc.; R2-R5, R7 = H, OH, halo, etc.; R6 = H, alkyl; A, D = CR1, N (provided that at least one of A and D = N); E, G = CR1; Z = N, CR7; n = 0-2], useful for the treatment of depression (including but not limited to major depressive disorder, childhood depression and dysthymmal, anxiety, panic disorder, post-traumatic stress disorder, premenstrual dysphoric disorder (also known as premenstrual syndrome), attention deficit disorder (with and without hyperactivity), obsessive compulsive disorder, social anxiety disorder, social anxiety disorder, obesity, eating disorders such as anorexia nervosa, bullmia nervosa, vasomotor flushing, cocaine and alc. addition, sexual dysfunction and related illnesses, were prepared Thus, reacting (2R)-2,3-dihydro[1,4]dioxino[2,3-f]quinolin-2-ylmethyl-4-methylbenznesulfonate (multi-step preparation given) with 5-methoxy-3-[1,2,3,5]-(1,2),5

IA receptor activity (biol. data given).
460353-58-6P 460353-70-2P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (preparation of antidepressant azaheterocyclylmethyl derivs. of 2,3-dihydro-1,4-dioxino[2,3-f]quinoline)
460353-58-6 CAPLUS
1,4-bioxino[2,3-f]quinoline, 2-[[4-(5-fluoro-1H-indol-3-y1)-3,6-dihydro-1(2H)-pyridinyl)methyl]-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

L14 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

1,4-Dioxino[2,3-f]quinoline, 2-[[3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-pyridinyl]methyl]-8-ethyl-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

460353-57-5P 460353-59-7P 460353-60-0P 460353-61-1P 460353-62-2P 460353-63-3P 460353-64-4P 460353-65-5P 460353-66-6P 460353-68-8P 460353-71-3P 460353-71-3P 460353-77-5P 460353-73-5P 460353-77-5P 460353-78-3P 460353-78-4P 460353-80-4P 460353-80-5P 460353-85-8P 460353-80-4P 460353-81-5P 460353-80-2P 460353-80-3P 460353-81-5P 460353-81-5P 460353-80-5P 460353-95-5P 46035

L14 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(Uses)
(prepn. of antidepressant azaheterocyclylmethyl derivs. of
2,3-dihydro-1,4-dioxino[2,3-f]quinoline)
460353-57-5 CAPLUS
1,4-bioxino[2,3-f]quinoline, 2-[[3,6-dihydro-4-(5-methoxy-1H-indol-3-yl)-1(2H)-pyridinyl]methyl]-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

460353-59-7 CAPLUS 1,4-Dioxino[2,3-f]quinoline, 2-[[4-[(5-fluoro-lH-indol-3-yl)methyl]-1-piperidinyl]methyl]-2,3-dihydro-, (ZS)- (CA INDEX NAME)

Absolute stereochemistry.

460353-60-0 CAPLUS 1,4-Dioxino[2,3-f]quinoline, 2-[[3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-

L14 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

460353-63-3 CAPLUS 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(5-fluoro-1-methyl-1H-indol-3-y1)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

460353-64-4 CAPLUS
1,4-Dioxino[2,3-f]quinoline, 2-[[4-[(5-fluoro-1H-indol-3-y1)methyl]-1-piperidinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (CA INDEX NAME)

L14 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) pyridinyl]methyl]-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

460353-61-1 CAPLUS
1H-Indole-5-carbonitrile, 3-[1-[((2S)-2,3-dihydro-1,4-dioxino[2,3-f]quinolin-2-yl]methyl]-1,2,3,6-tetrahydro-4-pyridinyl]- (CA INDEX NAME)

Absolute stereochemistry.

460353-62-2 CAPLUS
1H-Indole-5-carboxamide, 3-{1-[{(2S)-2,3-dihydro-1,4-dioxino[2,3-f]quinolin-2-yl]methyl]-1,2,3,6-tetrahydro-4-pyridinyl}- (CA INDEX NAME)

L14 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

460353-65-5 CAPLUS
1,4-Dioxino[2,3-f]quinoline, 2-[[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

460353-66-6 CAPLUS
1,4-Dioxino[2,3-f]quinoline, 2-([4-(6-fluoro-lH-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (CA INDEX NAME)

L14 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued

RN 460353-68-8 CAPLUS
CN 1,4-Dloxino[2,3-f]quinoline, 2-[[4-(5-fluoro-lH-indol-3-y1)-3,6-dihydro1(2H)-pyridinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 460353-69-9 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-2-[[4-(1H-indol-3-y1)-1-piperidinyl]methyl]-8-methyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

L14 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued

RN 460353-73-5 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoline, 2-[[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl]-6-fluoro-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 460353-74-6 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(5-fluoro-1H-indol-3-y1)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-6-methoxy-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

L14 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 460353-71-3 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoline, 8-ethyl-2-[[4-(5-fluoro-1H-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 460353-72-4 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoline, 6-fluoro-2-[[4-(5-fluoro-1H-indol-3-yl)-3,6-dhydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-, (2S)- (CA INDEX NAME)
Absolute stereochemistry.

L14 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued

RN 460353-75-7 CAPLUS
CN 1,4-0loxino[2,3-f]quinolin-8-amine, 2-[[4-(5-fluoro-1H-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 460353-76-8 CAPLUS
CN 1,4-Dioxino(2,3-f)quinoline, 2-[[4-(7-ethyl-1H-indol-3-yl)-3,6-dihydro-1(2H)-pyteidnyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (CA INDEX NAME)

L14 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

460353-77-9 CAPLUS
1,4-Dioxino[2,3-f]quinoline, 2-[[4-{5-chloro-lH-indol-3-yl}-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

460353-78-0 CAPLUS
1,4-Dioxino[2,3-f]quinoline, 2-[[4-(7-fluoro-1H-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl]methyl}-2,3-dihydro-8-methyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

L14 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN CRN 460353-79-1 CMF C27 H27 N3 O2

Double bond geometry as shown.

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460353-81-5 CAPLUS
1,4-Dioxino[2,3-f]quinoline, 2-{[3,6-dihydro-4-(1H-indol-3-yl)-1{2H}-pyridinyl}methyl]-2,3-dihydro-9-methyl-, {2S}- {CA INDEX NAME}

L14 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

460353-79-1 CAPLUS
1,4-Dioxino[2,3-f]quinoline, 2-[[3,6-dihydro-4-(5-methyl-1H-indol-3-yl)-1(2H)-pyridinyl)methyl]-2,3-dihydro-8-methyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

460353-80-4 CAPLUS 1,4-Dioxino[2,3-f]quinoline, 2-[[3,6-dihydro-4-(5-methyl-1H-indol-3-yl)-1(2H)-pyxdianyl]methyl]-2,3-dihydro-8-methyl-, (2S)-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

L14 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

460353-82-6 CAPLUS 1,4-Dioxino[2,3-f]quinoline, 8-ethyl-2,3-dihydro-2-[[4-(1H-indol-3-yl)-1-piperidinyl]methyl]-, (ZS)- (CA INDEX NAME)

Absolute stereochemistry.

460353-83-7 CAPLUS 1,4-Dioxino[2,3-f]quinoline, 2-[{3,6-dihydro-4-{5-methoxy-1H-indol-3-yl}-1(2H)-pyridinyl]methyl}-2,3-dihydro-, (2S)-, (2E)-2-butenedioate {1:1} (SCI) (CA INDEX NAME)

L14 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

HO2C E CO2H

460353-84-8 CAPLUS
1,4-Dioxino[2,3-f]quinoline, 2-[[4-[(5-fluoro-lH-indol-3-yl)methyl]-1-piperidinyl]methyl]-2,3-dihydro-, (2S)-, ethanedioate (2:3) (9CI) (CA INDEX NAME)

CM 1

CRN 460353-59-7 CMF C26 H26 F N3 O2

Absolute stereochemistry.

114 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

CM 2

CRN 144-62-7 CMF C2 H2 O4

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460353-85-9 CAPLUS
1H-Indole-5-carbonitrile, 3-[1-[((2S)-2,3-dihydro-1,4-dioxino[2,3-f]quinolin-2-yl]methyl]-1,2,3,6-tetrahydro-4-pyridinyl]-,
(2E)-2-butenedioate (1:1) (CA INDEX NAME)

CM 1

CRN 460353-61-1 CMF C26 H22 N4 O2

Absolute stereochemistry.

L14 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

Double bond geometry as shown.

460353-86-0 CAPLUS
1H-Indole-5-carboxamide, 3-[1-[[[2S]-2,3-dihydro-1,4-dioxino[2,3-f]quinolin-2-yl]methyl]-1,2,3,6-tetrahydro-4-pyridinyl]-,
(2E)-2-butenedioate [1:1] (CA INDEX NAME)

Absolute stereochemistry.

L14 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

Double bond geometry as shown.

460353-87-1 CAPLUS 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(5-fluoro-1-methyl-1H-indol-3-yl)-3,6-dihydro-1[2H)-pyridinyl]methyl]-2,3-dihydro-, dihydrochloride, (2S)-(9CI)

(CA INDEX NAME)

L14 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

460353-88-2 CAPLUS
1,4-Dioxino[2,3-f]quinoline, 2-[[4-{6-fluoro-1H-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl]methyl)-2,3-dihydro-8-methyl-, (2S)-, ethanedioate (1:2)
(9CI) (CA INDEX NAME)

CM 1

CRN 460353-66-6 CMF C26 H24 F N3 O2

Absolute stereochemistry.

L14 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RN 460353-90-6 CAPLUS
COPYRIGHT 2007 ACS on STN (Continued)
1,000 A

INDEX NAME)

CM 1

CRN 460353-69-9 CMF C26 H27 N3 O2

Absolute stereochemistry.

CM 2

Double bond geometry as shown.

460353-91-7 CAPLUS 1,4-Dioxino[2,3-f]quinoline, 8-ethyl-2-[{4-(5-fluoro-lH-indol-3-yl)-3,6-dihydro-(28)-y,(28)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 460353-71-3 CMF C27 H26 F N3 O2

Absolute stereochemistry.

Page 100

L14 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN CM 2 (Continued)

CRN 144-62-7 CMF C2 H2 Q4

460353-89-3 CAPLUS 1,4-Dioxino[2,3-f]quinoline, $2-[\{4-(5-f]uoro-1H-indol-3-yl\}-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-8-methyl-, (2S)-, (2E)-2-butenedioate (1:1) (9C1) (CA INDEX NAME)$

CRN 460353-68-8 CMF C26 H24 F N3 O2

Absolute stereochemistry.

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

L14 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

460353-92-8 CAPLUS
1,4-Dioxino[2,3-f]quinoline, 6-fluoro-2-{[4-{5-fluoro-1H-indol-3-yl}-3,6-dihydro-1(2H)-pyridinyl]methyl}-2,3-dihydro-, (2S)-, (2E)-2-butenedioate (2:1) (9CI) (CA INDEX NAME)

CRN 460353+72-4 CMF C25 H21 F2 N3 O2

L14 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

HO2C E CO2H

RN 460353-93-9 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(5-fluoro-lH-indol-3-yl)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-6-methoxy-, (28)-,
(2E)-2-butenedioate
(1:1) (9C1) (CA INDEX NAME)

CM 1

CRN 460353-74-6 CMF C26 H24 F N3 O3

Absolute stereochemistry.

L14 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

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460353-94-0 CAPLUS
1,4-Dioxino[2,3-f]quinolin-8-amine, 2-[[4-(5-fluoro-lH-indol-3-y1)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-, (2S)-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CRN 460353-75-7 CMF C25 H23 F N4 O2

Absolute stereochemistry.

L14 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

Double bond geometry as shown.

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460353-95-1 CAPLUS
1,4-Dioxino[2,3-f]quinoline, 8-ethyl-2,3-dihydro-2-[[4-(1H-indol-3-yl)-1-piperidinyl]methyl]-, [2S]-, (2E)-2-butenedioate [9CI] (CA INDEX NAME)

Absolute stereochemistry.

L14 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

HO2C E CO2H

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L14 ANSWER 24 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:100823 CAPLUS
DOCUMENT NUMBER: 130:168383
Preparation of 2-{azaheterocyclymethyl}-2,3,8,9-tetrahydro-7H-1,4-dioxino{2,3-e}indol-8-ones as antipsychotics.
Stack, Gary Paul
NUMBER: American Home Products Corporation, USA
OCUMENT TYPE: Patent
DOCUMENT TYPE: Patent

DOCUMENT TYPE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE US 5869490 PRIORITY APPLN. INFO.: 19971009 19990209 А US 1997-947565 US 1997-947565

OTHER SOURCE(S):

CASREACT 130:168383; MARPAT 130:168383

AB Title compds. [I; X = H2, O; R1 = H, OH, halo, CF3, OCF3, alkyl, alkoxy, aralkoxy, alkanoyloxy, amino, alkanamido. alkanesulfonamido; Z = (substituted) piperazinyl, (substituted) (benzo-fused) piperidinyl), were prepared Thus,

(R)-(2-tosyloxymethyl)-6-fluoro-2,3,8,9-tetrahydro-7H-1,4-dioxino[2,3-e]indol-8-one and tetrahydroisoquinoline were heated 4 h in Mezso to give (S)-2-(3,4-dihydro-1H-isoquinolin-2-ylmethyl)-6-fluoro-2,3,8,9-tetrahydro-7H-1,4-dioxino[2,3-e]indol-8-amine, isolated as the fumarate. This showed D2 receptor affinity with IC50 = 0.23 nM.

17 206355-42-2P 220456-60-0P 220456-63-3P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of azaheterocyclymethyltetrahydrodioxinoindolones as antipsychotics)

RN 206355-42-2 CAPLUS

CN 8H-1,4-Dioxino(2,3-e]indol-8-one, 2-{[3,6-dihydro-4-(1H-indol-3-yl)-1(2H)-pyridinyl]methyl]-6-fluoro-2,3,7,9-tetrahydro-, (2S)- (CA INDEX NAME)

L14 ANSWER 24 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE REFERENCE COUNT:

L14 ANSWER 24 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN Absolute stereochemistry. (Continued)

220456-60-0 CAPLUS 8H-1,4-Dioxino[2,3-e]indol-8-one, 6-fluoro-2,3,7,9-tetrahydro-2-[[4-(1H-indol-3-yl)-1-piperidinyl]methyl]- (CA INDEX NAME)

220456-63-3 CAPLUS
8H-1,4-Dioxino(2,3-e)indo1-8-one,
[3,6-dihydro-4-(1H-indo1-3-yl)-1(2H)pyridinyl]methyl]-6-fluoro-2,3,7,9-tetrahydro- (CA INDEX NAME)

L14 ANSWER 25 OF 25 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 1998:251174 CAPLUS DOCUMENT NUMBER: 128:308493 PREDAFALIO

128:308493
Preparation of azaheterocyclymethyl derivatives of 2,3,8,9-tetrahydro-7h-1,4-dioxino[2,3-e]indol-8-one for the treatment of brain dopamine dysregulation

Stack, Gary Paul
American Home Products Corporation, USA
PCT Int. Appl., 40 pp.
CODEN: PIXXD2 INVENTOR(S):

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

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OTHER SOURCE(S): MARPAT 128:308493

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

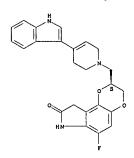
The title compds. [I; X = H2, O; R1 = H, OH, halo, etc.; Z = II, III, IV (wherein R2 = H, C1-6 alkyl, C3-8 cycloalkyl, etc.; R3 = H and R4 = H, (un)substituted 1-benzimidazolyl-2-one, indolyl, etc.; R3R4 taken

together
with the carbon atom to which they are attached form V or VI; R5 = H
R6 = (un)substituted Ph, naphthyl, thienyl, etc.; R5R6 taken together

the carbon atoms to which they are attached complete a benzene ring optionally substituted with R1)] and their salts, useful for the treatment of brain dopamine dysregulation, especially schizophrenia or a schizoaffective

L14 ANSWER 25 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) disorder, were prepd. Thus, reaction of (R)-2-(toluene-4-sulfonyloxymethyl)-2,3,8,9-tetrahydro-7H-1,4-dioxino(2,3-e]indol-8-one (prepn. described) with tetrahydroisoquinoline in DMSO afforded 82% (S)-I [X = H2: R1 = H; Z = 3,4-dihydro-1H-isoquinolin-2-y1] which showed IC50 [X = H2; R1 = H; Z = 3,4-dihydro-lH-isoquinolin-2-y1] which showed [C50 of 0.35 nM against the dopamine D2 receptor binding.
17 206335-42-2P 206355-44-4P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of azaheterocyclymethyl derivs. of 2,3,8,9-tetrahydro-7h-1,4-dioxino[2,3-e]indol-8-one for the treatment of brain dopamine dysregulation)
RNN 206355-42-2 CAPLUS CN 8H-1,4-Dioxino[2,3-e]indol-8-one, 2-[[3,6-dihydro-4-(1H-indol-3-y1)-1(2H)-pyridinyl]methyl]-6-fluoro-2,3,7,9-tetrahydro-, (2S)- (CA INDEX NAME) of

Absolute stereochemistry.



206355-44-4 CAPLUS
8H-1,4-Dioxino[2,3-e]indol-8-one, 6-fluoro-2,3,7,9-tetrahydro-2-[{4-{lh-indol-3-yl}-1-piperidinyl]methyl}-, {2S}- (CA INDEX NAME)

Absolute stereochemistry.

L14 ANSWER 25 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

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                 CA/CAplus enhanced with CAS indexing in pre-1907 records
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                 Full-text patent databases enhanced with predefined
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NEWS EXPRESS 19 SEPTEMBER 2007: CURRENT WINDOWS VERSION IS V8.2,
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SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

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http://www.cas.org/support/stngen/stndoc/properties.html

=>
Uploading C:\Program Files\Stnexp\Queries\10-556,931c.str

chain nodes :
11 12
ring nodes :
1 2 3 4 5 6 7 8 9 10 15 16 17 18 19 20 21 22 23
chain bonds :
8-11 11-12
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 15-16 15-20 15-21 16-17
16-23 17-18 18-19 19-20 21-22 22-23
exact/norm bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 8-11 9-10 11-12 15-16 15-20
15-21 16-17 16-23 17-18 18-19 19-20 21-22 22-23

G1:C,N

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:CLASS 12:CLASS 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

Structure attributes must be viewed using STN Express query preparation.

=> s 11 sss sam

SAMPLE SEARCH INITIATED 17:06:55 FILE 'REGISTRY'

317 ITERATIONS

SAMPLE SCREEN SEARCH COMPLETED - 317 TO ITERATE

29 ANSWERS

100.0% PROCESSED SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 5272 TO 7408 PROJECTED ANSWERS: 257 TO 903

L2 29 SEA SSS SAM L1

=> Uploading C:\Program Files\Stnexp\Queries\10-556,931d.str

chain nodes :

11 12

ring nodes :

1 2 3 4 5 6 7 8 9 10 15 16 17 18 19 20 21 22 23

chain bonds : 8-11 11-12 ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 15-16 15-20 15-21 16-17

16-23 17-18 18-19 19-20 21-22 22-23

exact/norm bonds :

 $1-2 \quad 1-6 \quad 2-3 \quad 3-4 \quad 4-5 \quad 5-6 \quad 5-7 \quad 6-10 \quad 7-8 \quad 8-9 \quad 8-11 \quad 9-10 \quad 11-12 \quad 15-16 \quad 15-20$

15-21 16-17 16-23 17-18 18-19 19-20 21-22 22-23

isolated ring systems :
containing 1 : 15 :

G1:C,N

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:CLASS 12:CLASS 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom

L3 STRUCTURE UPLOADED

=> d 13

L3 HAS NO ANSWERS

L3 STR

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

Structure attributes must be viewed using STN Express query preparation.

=> s 13 sss sam

SAMPLE SEARCH INITIATED 17:09:13 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 317 TO ITERATE

100.0% PROCESSED 317 ITERATIONS 12 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 5272 TO 7408

PROJECTED ANSWERS: 33 TO 447

L4 12 SEA SSS SAM L3

=> s l3 sss full

FULL SEARCH INITIATED 17:09:59 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 6781 TO ITERATE

100.0% PROCESSED 6781 ITERATIONS 293 ANSWERS

SEARCH TIME: 00.00.01

L5 293 SEA SSS FUL L3

=> file caplus

COST IN U.S. DOLLARS SINCE FILE TOTAL

ENTRY SESSION

FULL ESTIMATED COST 174.80 175.01

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FILE COVERS 1907 - 27 Nov 2007 VOL 147 ISS 23 FILE LAST UPDATED: 26 Nov 2007 (20071126/ED)

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http://www.cas.org/infopolicy.html

=> s 15 L6 26 L5 => s 14 L7 3 L4 => s 15 L8 26 L5

=> d ibib abs hitstr 1- YOU HAVE REQUESTED DATA FROM 26 ANSWERS - CONTINUE? Y/(N):y

L8 ANSWER 1 OF 26 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2007:820627 CAPLUS DOCUMENT NUMBER: 147:181575

Heterocyclic compounds for inhibiting the

melanocortin

SOURCE:

receptor MC2R

Tkachenko, S. E.; Okun, Ilya Matusovich; Rivkis, Skot Andre; Kravchenko, D. V.; Khvat, Alexander Viktorovich; Ivashchenko, A. V. Ivashchenko, Andrei Aleksandrovich, Russia; Chemdiv INVENTOR(S):

PATENT ASSIGNEE(S):

Russ., 118pp. CODEN: RUXXE7 Patent

DOCUMENT TYPE: LANGUAGE:

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

1	PAT	ENT	NO.			KIN	D	DATE			APPL	ICAT	ION	NO.		D.	ATE	
-							-									-		
F	ŧυ	2303	597			C1		2007	0727		RU 2	006-	1163	03		2	0060	512
7	10	2007	1331	80		A1		2007	1122	1	WO 2	006-	RU52	8		2	0061	012
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
			CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
			GE,	GH,	GM,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE.	KG.	KM.	KN.	KP.
			KR,	KZ,	LA.	LC.	LK.	LR,	LS,	LT.	LU.	LV.	LY.	MA,	MD,	MG.	MK.	MN.
			MW,	MX,	MY.	MZ.	NA,	NG.	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RS,
			SC,	SD,	SE,	SG,	SK,	SL,	SM,	sv,	SY,	TJ,	TM,	TN,	TR,	TT,	TZ,	UA,
			UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW								
		RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	Hυ,	IE,
			IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	BJ,
			CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	GH,
			GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
			KG,	KZ,	MD,	RU,	TJ,	TM										
PRIOR	TY	APP	LN.	INFO	. :						RU 2	006-	1163	03		A 2	0060	512

GT

ANSWER 1 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
(heterocyclic compds. for inhibiting the melanocortin receptor MC2R)

(heterocyclic compds. for inhibiting the melanocortin receptor MC2R) 944465-94-5 CAPLUS 4-1soquinolinecarboxamide, N-{(2,3-dihydro-1,4-benzodioxin-2-y1)methyl}-1,2,3,4-tetrahydro-3-(1H-indol-3-y1)-2-methyl-1-oxo- (CA INDEX NAME)

944466-23-3 CAPLUS
4-Isoquinolinecarboxamide, N-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl)1,2,3,4-tetrahydro-3-(lH-indol-3-yl)-2-(2-methoxyethyl)-1-oxo- (CA INDE

ANSWER 1 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

The invention relates to pharmaceutical compns. possessing inhibitory effect with respect to Mc2R-receptors, for preparing medicinal prepostablets, granules, capsules, suspensions, solns. or injections placed $\frac{1}{2}$

pharmaceutically acceptable package for treating diseases associated with oversecretion of ACTH. As active substance the composition comprises azaheterocyclic compound of general formulas (I) , (II) or (III) ,

azaheterocyclic compound of general formulas (I), (II) or (III), cin
R1 in I represents substituted alkyl, aryl, heteroaryl, heterocyclyl, or
R1 in II represents a substitute of amino-group chosen from hydrogen atom
or possibly substituted lower alkyl or lower acyl; each R2, R3 and R4
represents independently of one another a substitute of cyclic system
chosen from hydrogen atom, azaheterocycle, possibly substituted lower
alkyl, possibly substituted hydroxy-group, carboxy-group, cycloalkyl; or
R3 and R4 in common with carbon atoms to which they are bound form
azaheterocycle, or R1 in common with nitrogen atom to which it is bound,
and R3 and R4 in common with carbon atoms to which they are bound form
azaheterocycle through R1, R3 and R4. R18 and R19 represent

independently
of one another substitutes of amino-group chosen from hydrogen atom or
lower alkyl substituted with azaheterocycle as their racemates, optically
active isomers or their pharmaceutically acceptable salts and/or

ates: R2O and R21 in common with nitrogen atom to which they are bound form possibly substituted azaheterocycle. Also, the invention relates to a method for preparing a pharmaceutical composition and using compds. and

compns.
for preparing medicinal prepns. and for treatment or prophylaxis of

ases associated with enhanced activation of adrenocorticotropic hormone for compds. of general formulas I, II, and III, and for using compds. for exptl. investigations of indicated processes in vitro or in vivo also. 944

L8 ANSWER 2 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2007:748781 CAPLUS DOCUMENT NUMBER: 147:166205

AVI.: 1-0.01 CAPLUS
147:16625
Preparation of 1-0xo-3-(1H-indol-3-yl)-1,2,3,4tetrahydroisoquinolines, their combinatorial and
focused libraries and their protein kinase inhibitory
activities
Ivashchenko, Alexander Vasilevich: Kravchenko, D. V.;
Loseva, M. V.; Okun, Ilya Matusovich: Tkachenko, S.
E.; Khvat, Alexander Viktorovich
Alla Chem, LLC, USA
RUSS., 1399.
COEN: RUXXE7
Patent
Russian
1 TITLE:

INVENTOR (S):

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE C1 20070710 RU 2006-107658 20060314
A2 20070920 W0 2007-RU116 20070312
AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GC, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, N, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, SG, SK, SL, SM, SY, SY, TJ, TM, TN, TR, TT, TZ, UA, VC, VN, ZA, ZW, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, CI, CM, GA, GN, GQ, GW, ML, NR, NE, SN, TD, TG, BW, LS, MW, MZ, NA, NS, NS, LS, ZZ, TZ, UG, ZM, ZW, AM, MD, RU, TJ, TM

RU 2006-107658 A 20060314 RU 2302417 WO 2007105989 105989
AE, AG,
CN, CO,
GE, GH,
KP, KR,
MW, MX,
SC, SD,
UG, US,
AT, BE,
IS, IT,
BJ, CF,
GH, GM,
BY, KG, AL, CR, GM, KZ, MY, SE, UZ, BG, LT, CG, KE, PRIORITY APPLN RU 2006-107658 A 20060314

OTHER SOURCE(S): MARPAT 147:166205

L8 ANSWER 2 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

AB 1-Oxo-3-(1H-indol-3-yl)-1,2,3,4-tetrahydroisoquinolines, including their cis and trans isomers (1; R1, R2, R4 = H, alkyl; R3 = alkyl, cycloalkyl, and alkyl optionally substituted by aryl, heteroaryl, heterocyclyl, alkoxy, amino, alkylamino, dialkylamino) and 4-carbamoyl-1-oxo-3-(1H-indol-3-yl)-1,2,3,4-tetrahydroisoquinolines [II; same R1-R4; R5, R6 = H, aryl, heteroaryl, heteroaryl, cycloalkyl, alkyl, and alkyl optionally substituted by aryl, heteroaryl, heterocyclyl, cycloalkyl, cycloalkyl, cycloalkyl, alkoxy, amino, alkylamino, dialkylamino, or arylakylamino; or R5 and R6, together with N atom to which they are linked, form (un)substituted aza-heterocycle), useful as protein kinase inhibitors, are claimed. Compds. I are prepared by reaction of the corresponding indol-3-ylmethylamines with homophthalic anhydrides in an organic solvent.

is. II were prepared by treating I with thionyl chloride or 1,1'-carbonyldiimidazole and then with amines R5R6NH (same R5, R6) in an

organic solvent. Compds. of invention exhibit ABL kinase inhibiting activities. Thus, carbamoyl derivative III (preparation given as part of combinatorial library) showd 791 inhibition of ABL kinase. Combinatorial and focused libraries are also provided to reveal leading compds.

IT 943931-72-49 943934-78-99 943936-28-5P RL: CPN (Combinatorial preparation); PAC (Phermacological activity); THU (Therapeutic use); BIOL (Biological study); CMBI (Combinatorial study); PREP (Preparation); USES (Uses) (preparation of 1-oxo-3-(1H-indol-3-yl)-1,2,3,4-tetrahydroisoquinolines,

ANSWER 2 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (3R,4R)-rel- (CA INDEX NAME) (Continued)

Relative stereochemistry.

L8 ANSWER 2 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
their combinatorial and focused libraries and their ABL kinase
inhibitory activities)
RN 943931-72-4 CAPLUS
CN 4-Isoquinolinecarboxamide, N-[(2,3-dihydro-1,4-benzodioxin-2-y1)methyl]1,2,3,4-tetrahydro-2-methyl-3-(1-methyl-1H-indol-3-y1)-1-oxo-,
(3R,4R)-rel- (CA INDEX NAME)

Relative stereochemistry.

943934-78-9 CAPLUS 4-Isoquinolinecarboxamide, N-[$\{2,3-dihydro-1,4-benzodioxin-2-y1\}methy1$]- $\{2,3,4-tetrahydro-3-(1H-indol-3-y1)-2-\{2-methoxyethy1\}-1-oxo-,\{3R,4R\}-rel-$ (CA INDEX NAME)

943936-28-5 CAPLUS

94393-2-2-3 CAPLUS
4-Isoquinolinecarboxamide, N-((2,3-dihydro-1,4-benzodioxin-2-yl)methyl)1,2,3,4-tetrahydro-2-(2-methoxyethyl)-3-(1-methyl-1H-indol-3-yl)-1-oxo-,

ANSWER 3 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:13522 CAPLUS 146:121816 DOCUMENT NUMBER:

TITLE:

146:121816
Preparation of sulfonylindoles as non-nucleoside HIV reverse transcriptase inhibitors for the treatment of HIV infection and AIDS Lindsley, Craig W.: Leister, William H.; Wolkenberg, Scott E. Merck & Co., Inc., USA PCT Int. Appl., 85pp., which CODEN: PIXXD2
Patent

INVENTOR (S):

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	ENT :				KIN	_	DATE				ICAT					ATE	
	2007				A2		2007								_	0060	
	2007				A3		2007								•		
	W:	AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	вв,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
							DE,										
		GE,	GH,	GM,	HN,	HR,	HU,	ID,	IL.	IN.	IS,	JP,	KE,	KG,	KM,	KN,	KP,
		KR,	ΚZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,
		MW,	MX,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RS,	RU,
		SC,	SD,	SE,	SG,	SK,	SL,	SM,	SY,	TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,
		US,	UZ,	VC,	VN,	ZA,	ZM,	ZW									
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	Hυ,	IE,
		ıs,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	G₩,	ML,	MR,	ΝE,	SN,	TD,	TG,	BW,	GH,
		GM,	KΕ,	LS,	MW,	ΜZ,	NΑ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	ΚZ,	MD,	RU,	TJ,	TM,	AP,	EA,	EP,	OA						
RIORITY	Y APPLN. INFO.:		. :					US 2005-694744P						P 20050628			
									US 2005-707365P					P 20050811			

OTHER SOURCE(S): MARPAT 146:121816

Title compds. I [wherein Rl = halo, CN, NO2, etc.; R2 = (un)substituted alkyl, haloalkyl, (hetero)aryl, etc.; R3 = H or alkyl; R4 = H, (un)substituted alkyl, (hetero)aryl, etc.; R5 = H or Rl, with

limitations]
and their pharmaceutically acceptable salts were prepared as

non-nucleoside

ANSWER 3 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) HIV reverse transcriptase inhibitors. For instance, successive substitution of 2,5-dichloro-3-(phenylsulfonyl)-lH-indole with hydrazine, treatment with Raney Ni, and acylation with cyclopropanecarbonyl chloride gave amide II. This product showed inhibition against HIV reverse transcriptase both in vitro and in vivo with IC50 values of less than 20 µM. It also showed inhibition of HIV replication with IC55 < 1 µM, and exhibited no cytotoxicity at its IC95 concn. Therefore, I and their phermaceutical compms. are useful in the inhibition of HIV reverse transcriptase, the prophylaxis and treatment of infection by HIV and in the prophylaxis, delay in the onset, and treatment of AIDS.
918493-34-2P

918493-34-2P
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (drug candidate; preparation of sulfonylindoles as non-nucleoside HIV reverse transcriptase inhibitors for treatment of HIV infection and

918493-34-2 CAPLUS

1,4-Benzodioxin-2-carboxamide, N-[5-chloro-3-(phenylsulfonyl)-1H-indol-2-yl]-2,3-dihydro- (CA INDEX NAME)

$$0 \qquad \begin{array}{c} 0 \qquad \qquad \\ \parallel \qquad \qquad \\ -NH \qquad \qquad \\ Ph-S=0 \qquad \\ 0 \qquad \qquad \\ \end{array}$$

ANSWER 4 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

The invention relates to compds. of formula I, which are useful as inhibitors of protein kinases, particularly of JRK family and ROCK family kinases. The invention also provides pharmaceutically acceptable compns. comprising said compds. and methods of using the compns. in the treatment of various disease, conditions, or disorders. Compds. of formula I wherein Q is a (un)substituted (un)saturated 3 to 8-membered (hetero)monocyclic ring and (un)saturated 8- to 12-membered eropbicyclic

(hetero)bicyclic ring; Z is a bond, NH, Cl-3 alkylamine, and C=CH2; R1 and R2 are independently (un)substituted Cl-2 alkyl; R3 is H, Cn, NO2, (un)substituted Cl-6 aliphatic; and their pharmaceutically acceptable

thereof are claimed. Example compound II was prepared by cross-coupling

 $\hbox{$4$-bromo-1-tosyl-1H-$\{2,3-b\}$ pyridine with 3-dimethylaminophenylboronic acid derivative $$Al1$$ the invention compds, were evaluated for their JAX and $$4$. }$ ROCK

kinase inhibitory activity. From the kinase inhibition assay, it was determined that compound II exhibited Ki values of less than 0.5 μM

JAK2, JAK3 and ROCK-I. 916172-58-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(drug candidate; preparation of pyrrolopyridines as inhibitors of protein

kinase useful in the treatment of various diseases)
916172-58-2 CAPLUS
2-Pyridinamine, N-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl)-6-(lH-pyrrolo[2,3-b]pyridin-4-yl)- (CA INDEX NAME)

Page 112

L8 ANSWER 4 OF 26 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2006:1252802 CAPLUS DOCUMENT NUMBER: 146:27814 TITLE: Purral name: Pyrrolopyridines useful as inhibitors of protein

kinase and their preparation, pharmaceutical compositions, and use in the treatment of various diseases

INVENTOR (S):

diseases
Ledeboer, Mark W.: Wannamaker, Marion W.: Farmer, Luc
J.: Wang, Tiansheng: Pierce, Albert C.:
Martinez-Botella, Gabriel: Bethiel, Randy S.: Bemis,
Guy W.: Wang, Jian: Salituro, Francesco G.: Arnost,
Michael J.: Come, Jon H.: Green, Jeremy: Stewart,
Michael H.: Marhefka, Craig
Vertex Pharmaceuticals Incorporated, USA

PATENT ASSIGNEE (S):

PCT Int. Appl., 201pp. CODEN: PIXXD2 Patent

DOCUMENT TYPE:

English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. WO 2006127587 A1 20061330 WC 2006-US19711 20060522

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EC, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, DM, KN, KP, KR,
KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MM, MX,
MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,
SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
CF, CG, CI, CM, GA, GM, GG, GW, ML, MR, NE, SN, TD, TG, BM, GH,
GM, KE, LS, MM, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
US 2007135466 A1 20070614 US 2005-633554P 200050522

US 2006-438748 US 2005-683554P

PRIORITY APPLN. INFO.:

OTHER SOURCE(S): MARPAT 146:27814

ANSWER 4 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR REFERENCE COUNT:

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

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L8 ANSWER 5 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) piperazinyl) that are inhibitors of histone deacetylase (HDAC) and are useful for treating cancer, neurodegenerative diseases, schizophrenia, stroke and other diseases. Thus, (2S)-2-[[(5-methoxy-2-methyl-1H-indol-3-y1)ectyl]aminol-8-oxo-N-[2-(2-phenyl-1H-indol-3-y1)ethyl]nonanamide was prepd. by a multistep sequence involving reactions of Me 8-oxononanoate, ethylenediol, (S)-(-)-4-benzyl-2-oxazolidinone, 2-(2-phenyl-1H-indol-3-y1)ethanaminium chloride, and 5-methoxy-2-methyl-3-indolylacetic acid. Compds. of the invention were found to have HDAC inhibitory activity (IC50
        L8 ANSWER 5 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:54368 CAPLUS
DOCUMENT NUMBER: 144:150635
TITLE: Preparation of amino acid amic
                                                                                                 Preparation of amino acid amide derivatives as
                                                                                              inhibitors of histone deacetylase
Chakravarty, Prasun K.; Colletti, Steven L.;
         INVENTOR (S):
         Ingenito,
                                                                                              Raffaele; Jones, Philip; Meinke, Peter T.; Muraglia, Ester; Petrocchi, Alessia; Rowley, Michael;
                                                                                              Rita: Steinkuhler, Christian
Istituto di Ricerche di Biologia Molecolare p
Angeletti S.p.A., Italy: Merck & Co. Inc.
PCT Int. Appl., 161 pp.
CODEN: PIXXD2
Patent
        Scarpelli.
                                                                                                                                                                                                                                                                                                                                 (IC50
                                                                                                                                                                                                                                                                                                                                                0

< 30 µM).

B74154-63-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU

(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(Uses)
         PATENT ASSIGNEE (S):
                                                                                                                                                                                                                                                                                                                                 īТ
        SOURCE:
         DOCUMENT TYPE:
                                                                                                                                                                                                                                                                                                                                               (Uses)
(preparation of amino acid amide derivs. as inhibitors of histone deacetylase)
674154-63-9 CAPLUS
1,4-Benzodioxin-2-carboxamide,
dihydro-N-(151>-7-oxo-1-[[[2-(2-phenyl-
1H-indo1-3-yl)ethyl]amino]carbonyl]octyl]- (CA INDEX NAME)
           LANGUAGE :
                                                                                               English
         FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
WO 2006005941 A1 20060119 WO 2005-GB2729 20050711

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, F1, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JF, KE, KG, KM, KP, KR, KZ,
LC, LK, LK, LS, LT, LU, LV, MA, MD, MG, MK, MM, MM, MX, MZ,
NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
SL, SM, SY, TJ, TM, TN, TT, TZ, TZ, UA, UG, US, UZ, VC, VN, YU,
ZA, ZM, ZM
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, F1, FR, GB, GR, HU, IE,
IS, IT, LT, LU, LV, MC, NI, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
CF, CG, CI, CM, GA, GN, GG, GW, ML, MR, NE, SN, TD, TG, BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM
AU 2005261487 A1 20060119 AU 2005-261487 20050711
CA 2573378 A1 20060119 CA 2005-273378 20050711
EP 1768955 A1 20070404 EP 2005-759671 20050711
R: AT, BE, BG, CH, CY, CZ, ED, DK, EE, ES, F1, FR, GB, GR, HU, IE,
IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR
IN 2007DN00569 A 20070817 IU S2004-587177P
                                                                                                                                                                                                                                                                                                                                 Absolute stereochemistry.
                                                                                                                                                                                                                                                                                                                                                                                                       (CH2) 5
                                                                                                                                                                                                                                                                                                                                 REFERENCE COUNT:
                                                                                                                                                                                                                                                                                                                                                                                                                                            THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
                                                                                                                                                                WO 2005-GB2729
      OTHER SOURCE(S): MARPAT 144:150635

AB The invention relates to compda.

R1(CH2)0-3NR5COCH(NR4-X-(CH2)0-3R3)(CH2)3-
6COR2 [X is CH2, CO, SO2, COMH, CO2, C(S)NH or CONHSO2; R1 is
(un)substituted carbalkoxy, amino groups, aryl, aryloxy, cycloalkyl, aryl
or heterocyclyl; R2 is H, (un)substituted alkyl, carbamoyl, CF3,
cycloalkyl, aryl or heterocyclyl; R3 is H, CF3, oxo, OH, CN, halo, amino
groups, (un)substituted carboxylic ester, acyl, sulfonyl groups, etc.; R4
is H or alkyl; R5 is H or together with R1(CH2)0-3N forms (un)substituted
                                                                                                                                                                                                                                                                                                                                 FORMAT
                                                                                                                                                                                                                                                                                                                                                 ANSWER 6 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN R SOURCE(S): MARPAT 143:460182
                         ANSWER 6 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN SSION NUMBER: 2005:1219890 CAPLUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (Continued)
         ACCESSION NUMBER:
                                                                                                                                                                                                                                                                                                                                  OTHER
                                                                                              143:460:82
Preparation of pyrimidine derivatives for the treatment of abnormal cell growth Kath, John Charles; Luzzio, Michael Joseph Pfizer Inc, USA
U.S. Pat. Appl. Publ., 68 pp. CODEN: USXXCO
          DOCUMENT NUMBER:
                                                                                                143:460182
          TITLE:
         INVENTOR (S) :
           PATENT ASSIGNEE (S):
         SOURCE:
         DOCUMENT TYPE:
                                                                                                 Patent
           LANGUAGE:
                                                                                              English
3
         FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                                                                                                                                                                                                                                  DATE
                          PATENT NO.
                                                                                                 KIND
                                                                                                                       DATE
                                                                                                                                                                  APPLICATION NO.
                         US 2005256145
US 7109337
AU 2005243397
CA 2566707
WO 2005111023
                                                                                                                       20051117
                                                                                             A1
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AM,
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                                                                                                                                                               AU 2005-243397
CA 2005-2566707
WO 2005-IB1201
, BB, BG, BR, BW,
DZ, EC, EE, EG,
, IS, JP, KE, KG,
, MD, MG, MK, MN,
, RO, RU, SC, SD,
, UA, UG, US, UZ,
                                                                                                                                                                                                                                                                                                                                                Title compds. I \{n=1-3; R1=H, OH, alkyl, etc.; R2=H, alk(en/yn)yl, cycloalkyl, etc. and R1 and R2 may be taken together with the atom to which they are attached to form a cyclic group; <math>R3=H, aryl, heteroaryl, etc.] are prepared For instance, \{R\}-5-\{[4-(1-Phenylethylamino)-5-trifluoromethylpyrimidin-2-yl]amino]-1,3-dihydroindol-2-one is prepared
                                                                                                                        20051124
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GB, GD,
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CN, CO,
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                        CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, EM, LC, LK, LR, LS, LT, LU, LV, NA, MD, MG, MK, MN, MW, NI, NO, NZ, CM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, ZM, ZW

RW: BM, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, MR, NE, SN, TD, TG

EP 1751143

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, IS, IT, LI, LI, LU, MC, KL, LI, LI, LU, MC, NL, PL, PT, RO, SE, SI, SK, HR, LV, MK, YU

CN 1993945

NI 1029045

NI 2006205945

A1 20067011 NL 2005-1029045

NI 1031845

NI 201865

C2 200661214

NI 2006-018189

NI 2006-04576

A1 20061107 NC 2006-04596

NI 2006004576

A1 20061107 NC 2006-05196

NI 2006PA11890

A2 20061214

NI 2006-PA11890

A2 20061124

NI 2006-PA11890

A3 200612174

A4 20061124

NI 2006-PA11890

A5 2006-PA11890
                                                                                                                                                                                                                                                                                                                                 5-{(4-Chloro-5-trifluoromethylpyrimidin-2-yl}amino)-1,3-dihydroindol-2-one and (R|-(+)-1-phenethylamine. I are useful for the treatment of abnormal cell growth [no data].

IT 717907-07-8P, 5-{[4-{(2,3-Dihydrobenzo[1,4]dioxin-2-
                                                                                                                                                                                                                                         ZM,
CZ,
NL,
GQ,
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                                                                                                                                                                                                                                                                                                                                 ylmethyl)amino]-5-trifluoromethylpyrimidin-2-yl]amino]-1,3-dihydroindol-2-
                                                                                                                                                                                                                                                                                                                                                 one
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Usea)
(preparation of pyrimidine deriva. for treatment of abnormal cell
                                                                                                           20070214 EP 2005-732043 20050502
CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA,
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NO 2006-4576
IN 2006-DN5926
MX 2006-PA11890
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KR 2006-723767
US 2002-435670P
                           MX 2006PA11890
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         KR 2007012477
PRIORITY APPLN. INFO.:
                                                                                                                                                                                                                                             20061113
                                                                                                                                                                  US 2003-500742P
                                                                                                                                                                                                                                      P 20030905
                                                                                                                                                                                                                                                                                                                                 REFERENCE COUNT:
THIS
                                                                                                                                                                                                                                                                                                                                                                                                                                           THERE ARE 64 CITED REFERENCES AVAILABLE FOR
                                                                                                                                                                 US 2004-571312P
                                                                                                                                                                                                                                      P 20040514
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RECORD. ALL CITATIONS AVAILABLE IN THE RE

US 2003-733215

WO 2005-IB1201

US 2005-127809

A1 20031211

W 20050502

A3 20050512

FORMAT

10-556,931.trn L8 ANSWER 7 OF 26 CAPLUS COPYRIGHT 2007 ACS ON STN
ACCESSION NUMBER: 2005:1004705 CAPLUS
DOCUMENT NUMBER: 143:306169
Indole-2-carboxylic acid hydr.
INVENTOR(S): Bradley, Stuart Edward; Jeeva. Indole-2-carboxylic acid hydrazides Bradley, Stuart Edward; Jeevaratnam, Revathy Krulle, Thomas Martin; Procter, Martin James; Rowley, Robert John; Thomas, Gerard Hugh; Valdes, Ana Prosidion Limited, UK PCT Int. Appl., 27 pp. CODEN: PIXXD2 Perpetua; PATENT ASSIGNEE(S): DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE W0 2005085194 A2 20050915 W0 2005-GB872 20050308
W0 2005085194 A3 20060105
W: AB, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CM, CO, CR, CU, Cz, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MC, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RN: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1768957 A2 20070404 EP 2005-717940 20050308
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, LV, MK, YU
JP 2007527903 T 20071004 JP 2007-502366 20050308 JP 2007-502386 US 2004-551255P PRIORITY APPLN. INFO.: WO 2005-GB872 W 20050308 OTHER SOURCE(S): CASREACT 143:306169; MARPAT 143:306169 * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT * Compds. of formula I (wherein Y = -C(0)-. -S(0)2-, or -C(NH)-; Z = C1-4alkylene, O, -(CH2)mO-, -O(CH2)m, etc. (m = 1-4); R1, R2 = independently halogen, hydroxym cyano, etc.; R3 = C0-4alkyl, C1-4alkyl, etc.; R4 = H, -COOC0-4alkyl C1-4alkyl, etc.); R4 = H, -COOC0-4alkyl C1-4alkyl, etc.); R6 = H, -COOC0-4alkyl C1-4alkyl, etc.); R7 = H, -COOC0-4alkyl C1-4alkyl C1-4al prepared as inhibitors of glycogen phosphorylase. Thus, a solution of

L8 ANSWER 8 OF 26 CAPLUS COPYRIGHT 2007 ACS ON STN
ACCESSION NUMBER: 2005:86370 CAPLUS
DOCUMENT NUMBER: 142:309195
TITLE: Studies bounded.

142:309195
Studies towards the next generation of antidepressants. Part 4: Derivatives of 4-(5-fluoro-HH-indol-3-y1)cyclohexylamine with affinity for the serotonin transporter and the 5-HTIA

AUTHOR (S):

receptor
Evrard, Deborah A.; Zhou, Ping; Yi, Soo Y.; Zhou,
Dahui; Smith, Deborah L.; Sullivan, Kelly M.; Hornby,
Geoffrey A.; Schechter, Lee E.; Andree, Terrance H.;
Mewshaw, Richard E.
Chemical and Screening Sciences, Wyeth Research,
Princeton, NJ, 05343, USA
Bioorganic & Medicinal Chemistry Letters (2005),
15(4), 911-914
CODEN: BMCLES; ISSN: 0960-894X
Elsevier B.V

CORPORATE SOURCE:

SOURCE:

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal LANGUAGE:

English CASREACT 142:309195 OTHER SOURCE(S):

Derivs. of the serotonin reuptake inhibitor 4-(5-fluoro-1H-indol-3-yl)cyclohexylamine, in which serotonin 1A (5-HTIA) receptor

pharmacophoric

pharmacophoric
elements are incorporated, are reported. Analogs exhibiting affinity for both the serotonin transporter and the 5-HTIA receptor are described. Compds. containing 1-(4-indoly)piperazine and 2-(1H-indol-4-yloxy)ethylamine are promising leads for further SAR studies.

17 84072-02-6P 848072-03-PP RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(Uses) (Studies towards the next generation of antidepressants, derivs. of cyclohexylamine with affinity for the serotonin transporter) 848072-02-6 CAPLUS

1,4-Benzodioxin-2-methanamine, N-[cis-4-(5-fluoro-1H-indol-3-yl)cyclohexyl]-2,3-dihydro- (CA INDEX NAME)

Relative stereochemistry.

848072-03-7 CAPLUS 1,4-Benzodioxin-2-methanamine, N-{trans-4-(5-fluoro-1H-indol-3-yllcyclohexyll-2,3-dihydro- (CA INDEX NAME)

Relative stereochemistry.

Page 114

ANSWER 7 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) 5-chloro-1H-indole-2-carboxylic acid hydrazide (II) in 1,4-dioxane was treated with phenylmethanesulfonyl chloride and DIPEA for 16H at room temp. to provide 5-chloro-1H-indole-2-carboxylic acid N'-(phenylmethanesulfonyl) hydrazide (III). Compds. of formula I are useful in the prophylactic or therapeutic treatment of diabetes, hyperglycemia, hypercholesterolemia, hyperinsulinemia, hyperlipidemia, hypertension, atherosclerosis or tissue ischemia, e.g. myocardial ischemia, or as cardioprotectants or inhibitors of abnormal cell growth.
864658-90-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(preparation of indole-2-carboxylic acid hydrazides as inhibitors of

preparation of indole-2-carpoxylic divided by the propagation of indole-2-carpoxylic acid, 5-chloro, 2-[(2,3-dihydro-1,4-benzodioxin-2-yl)carboxylidazide (CA INDEX NAME)

ANSWER 8 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

REFERENCE COUNT:

THERE ARE 33 CITED REFERENCES AVAILABLE FOR

FORMAT

RECORD. ALL CITATIONS AVAILABLE IN THE RE

L8 ANSWER 9 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:1059361 CAPLUS
DOCUMENT NUMBER: 142:38264
TITLE: Preparation of indole derivatives with an improved antipaychotic activity.
INVENTOR(S): Bartolome-Nebreda, Jose Manuel; Andres-Gil, Jose Ignacio Janssen Pharmaceutica N.V., Belg. PCT Int. Appl., 43 pp. CODEN: PIXXD2 PATENT ASSIGNEE(S): SOURCE: DOCUMENT TYPE: Patent English 2 LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: 2004106346 A1 20041209 W0 2004-EP50922 20040526
W: AR, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BM, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, II, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MM, MW, KK, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, PG, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AK, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SU, SU, TD, TG PATENT NO KIND DATE APPLICATION NO. DATE WO 2004106346 WO 2004106298 A1 20041209 WO 2003-EP305789 20030530
 WO 2004106298
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 WO 2003-EP305/89
 2003030

 W: US
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR
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 AU 2004242802
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 ST, ST, ST, LI, LU, NL, SE, MC, PT.
 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, C2, EE, HU, PL, SK, JP 2006528957 US 2007066608 PRIORITY APPLN. INFO.: JP 2006-530219 US 2005-556931 WO 2003-EP5789 20040526 20051116 A 20030530 20061228 20070322 A 20030530 WO 2003-EP305789 WO 2004-EP50922 W 20040526 OTHER SOURCE(S): MARPAT 142:38264

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

ANSWER 9 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

805230-20-0 C19 H20 F N3 O2

2

REFERENCE COUNT:

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L8 ANSWER 9 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

AB The present invention relates to a novel indole derivs. I [al:a2a3:a4 = N:CHCH:CH, CH:NCH:CH, CH:CHN:CH, CH:CHN:CH, CH:CHN:CH, CH:CH220, CS(CH2)20, CC(C)20, S(CH2)20, CC(C) X = CR6, N; R1-R4, R6 = H, halo, CN, etc.; p = 0-3; R5 = H, alkyl; y = NR8(CH2)n, II, III, etc.; m = 0-1; n = 0-6; R8 = H, halo, alkyl; etc.; with the proviso] and their pharmaceutically acceptable acid or base addition salts that exhibit a binding affinity towards dopamine receptors, in particular towards dopamine D2, D3 and D4 receptors, with selective serotonin reuptake inhibition properties and acting as 5-HTIA agonists or partial agonists. E.g., a multi-step synthesis of IV, starting from 2-chloro-3-pyridinemine, which showed pIc50 of 6.7 and 7.1 against D2 and D3 receptor binding, resp., was given. The invention also relates to pharmaceutical compns. comprising the compds. I, the use thereof for the prevention and/or treatment of a range of psychiatric and neurol. disorders, in particular certain psychotic disorders, most in particular schizophrenia and processes for their production

IT 805232-67-1P 805322-71-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); USES (Uses)

(preparation of indole derivs. with an improved antipsychotic activity); N8 805232-67-1P CAPLUS

CN 1,4-Dioxino[2,3-c]pyridine-3-methanamine, N-[3-(5-fluoro-H-indol-3-v)] N8 805232-67-1P activition a the national control of the production of the production of activity of the production of

/Aty)
805232-67-1 CAPLUS
1,4-Dioxino[2,3-c]pyridine-3-methanamine, N-[3-(5-fluoro-1H-indol-3-yl)propyl]-2,3-dihydro-, ethanedioate (9CI) (CA INDEX NAME)

805230-16-4 C19 H20 F N3 O2

2

- с- он 0

805232-71-7 CAPLUS
1,4-Dioxino[2,3-b]pyridine-3-methanamine, N-[3-(5-fluoro-lH-indol-3-yl)propyl]-2,3-dihydro-, ethanedioate (9CI) (CA INDEX NAME)

L8 ANSWER 10 OF 26 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2004:1059319 CAPLUS DOCUMENT NUMBER: 142:38263

DOCUMENT NUMBER: TITLE:

Preparation of indole derivatives with an improved antipsychotic activity
Bartolome-Nebreda, Jose Manuel; Andres-Gil, Jose

INVENTOR (S):

Bartolome-Nebreda, Jose Manuel; A Ignacio Janssen Pharmaceutica N.V., Belg. PCT Int. Appl., 40 pp. CODEN: PIXXD2 Patent PATENT ASSIGNEE(S):

DOCUMENT TYPE:

LANGUAGE:

English 2

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	PA	TENT	NO.			KIN	D	DATE			APP	LICAT	ION	NO.		D	ATE	
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		W:												••		_		
		RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK.	EE	. ES.	FI.	FR.	GB.	GR.	HU,	ıE.
			IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	sĸ	, TR						
	ΑU	2004	2428	02		A1		2004	1209		ΑU	2004-	2428	02		2	0040	526
	CA	2525	282			A1		2004	1209		CA	2004-	2525	282		2	0040	526
	WO	2004	1063	46		A1		2004	1209		WO	2004-	EP50	922		2	0040	526
		W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	ВВ	, BG,	BR,	BW,	BY,	BZ,	CA,	CH,
												, EC.						
			GE,	GH,	GM,	HR,	HU,	ID.	IL.	IN.	IS	, JP,	KE.	KG,	KP.	KR.	KZ,	LC.
												MK.						
			NO,	NZ,	OM,	PG.	PH,	PL.	PT,	RO,	RU	, sc,	SD.	SE,	SG,	SK,	SL,	SY.
												, UZ.						
		RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD	, SL,	SZ,	TZ,	ŲG,	ZM,	ZW,	AM,
												, BE,						
			EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	IT	, LU,	MC,	NL,	PL,	PT,	RO,	SE,
			SI,	SK,	TR,	BF,	BJ,	CF,	CG,	CI,	СМ	, GA,	GN,	GQ,	GW,	ML,	MR,	NE.
			SN,	TD,	TG				-									
	EP	1636	239			Al		2006	0322		EΡ	2004-	7416	49		2	0040	526
	EP	1636	239			Bl		2007	0718									
												, IT,						
			IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL	, TR,	BG,	CZ,	EE,	HU,	PL,	SK,
IR																		
	JP	2006	5289	57		T		2006	1228		JΡ	2006-	5302	19		2	0040	526
	AT	3673	92			T		2007	0815		AT	2004-	7416	49		2	0040	526
	US	2007	0666	OB		A1		2007	0322		US	2005-	5569	31		2	0051	116
PRIC	RIT	Y APP	LN.	INFO	. :						WO	2006- 2004- 2005- 2003-	EP30	5789		A 2	0030	530
											WO	2003-	EP57	89		A 2	0030	530
											WO	2004-	EP50	922	,	W 2	0040	526

OTHER SOURCE(S): MARPAT 142:38263

^{*} STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT

The present invention relates to a novel indole derivs. I [al:a2a3:a4 = N:CHCH:CH, CH:NCH:CH, CH:CHCH:N: 2122 = OCH20, O(CH2)20, S(CH2)20, etc.; X = CR6, N; R1-R4, R6 = H, halo, CN, etc.; p = 0-3; R5 = 0.00

ANSWER 10 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) H, alkyl; Y = NR8(CH2)n, II, III, etc.; m = 0-1; n = 0-6; R8 = H, halo, alkyl, etc.; with the provisol and their pharmaceutically acceptable acid or base addn. salts that exhibit a binding affinity towards dopamine receptors, in particular towards dopamine D2, D3 and D4 receptors, with selective serotonin reuptake inhibition properties and acting as 5-HTIA agoniats or partial agonists. E.g., a multi-step synthesis of IV, starting from 2-chloro-3-pyridinamine, which showed pIC50 of 5.7 and 7.1 against D2 and D3 receptor binding, resp., was given. The invention also relates to pharmaceutical compns. comprising the compost. I, the use thereof for the prevention and/or treatment of a range of psychiatric and neurol. disorders, in particular certain psychotic disorders, most in particular schizophrenia and processes for their prodn. 805230-16-4P 805230-20-0P IT

RE: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(preparation of indole derivs, with an improved antipsychotic

activity)
RN 805230-16-4 CAPLUS
CN 1,4-Dioxino[2,3-c]pyridine-3-methanamine, N-{3-(5-fluoro-1H-indol-3-y1)propyl}-2,3-dihydro- (CA INDEX NAME)

805230-20-0 CAPLUS 1,4-Dioxino[2,3-b]pyridine-3-methanamine, N-[3-(5-fluoro-1H-indol-3-yl)propyl]-2,3-dihydro- (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ANSWER 11 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

Pyrimidine derivs. I (R1 = H, OH, alkyl, cycloalkyl, amino, etc.; R2 = H, alkyl, alkenyl, alkynyl, cycloalkyl, et.; R3 = H, aryl, heteroaryl, etc.; R4 = H, alkyl, cycloalkyl, heterocyclyl, etc.; n = 1, 2, 3), useful for treatment of abnormal cell growth, such as cancer, are prepared Thus, reaction of 5-(4-chloro-5-trifluoromethylpyrimidin-2-ylamino)-1,3-dihydroindol-2-one with (R)-(+)-u-phenethylamine in DEC/t-BUOH in the presence of disopropylethylamie at 80° for 16 h gave 11% 5-(4-(R-1-phenylethylamino)-5-trifluoromethylpyrimidin-2-ylamino]-1,3-dihydroindol-2-one dihydroindol-2-one. 717907-07-8P

7/17907-07-09
RI: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of pyrimidine derivs. for treatment of abnormal cell

growth) RN 717907-07-8 CAPLUS

REFERENCE COUNT:

THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

abnormal cell growth Kath, John Charles: Luzzio, Michael Joseph Pfizer Products Inc., USA PCT Int. Appl., 110 pp. CODEN: PIXXD2 INVENTOR (5): PATENT ASSIGNEE(S): SOURCE: DOCUMENT TYPE: LANGUAGE: Patent English FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE WO 2004056807 TG CA 2529611 AU 2003285614 EP 1625121 A1 A1 A1 20040708 20040714 20060215 CA 2003-2529611 AU 2003-285614 EP 2003-778613 20031208 Re 1625121 Al R: AT, BE, CH, DE, IE, SI, LT, LV, US 2005009853 B2 NL 1025067 Al NL 1025067 Al NL 1025067 AL NL 2006FN01255 AL NL 2006FN01253 AL NL 2006FN012 20031208 DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, FI, RO, MK, CY, AL, TR, BG, C2, EE, HU, SK 20050113 US 2003-733215 20031211 20060919 20040622 20050215 NL 2003-1025067 20031218 NZ 2004-543719 MX 2006-PA2608 IN 2006-DN1255 NO 2006-1533 US 2006-506689 US 2002-435670P 20050215 20070126 20070123 20070803 20060524 20061214 20041208 20041208 20060306 2006030B 20060404 20060B17

Preparation of pyrimidine derivatives for treatment

L8 ANSWER 11 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2004:546498 CAPLUS DOCUMENT NUMBER: 141:106485

οf

WO 2003-IB5883 W 20031208 US 2003-733215 A1 20031211

MARPAT 141:106485

US 2003-500742P

20021220

P 20030905

L8 ANSWER 12 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2004:252509 CAPLUS DOCUMENT NUMBER: 140:287394

TITLE:

Preparation of antidepressant cycloalkylamine derivatives of 2,3-dihydro-1,4-benzodioxane Evrard, Deborah Ann; Shah, Uresh Shantilal; Stack, INVENTOR (S):

Gary Paul PATENT ASSIGNEE(S):

Gary Paul Wyeth, John, and Brother Ltd., USA PCT Int. Appl., 39 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE : English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PRIORITY APPLN. INFO.:

OTHER SOURCE(S):

PATENT NO. KIND DATE APPLICATION NO. DATE WO 2004024723 20040325 1024723
AE. AG. AL.
CO. CR. CU.
GH. GM. HR.
LR. LS. LT.
PG. PH. PL.
TR. TT. TZ.
GH. GM. KZ.
KG. KZ. MD.
FI. FR. GB.
BF. BJ. CF. A1 WO 2003-US28296 20030911 RW: US 2004127543 US 7041697 CA 2498010 AU 2003267082 EP 1537103 BR 2003014280 CN 1681807 JP 2006503037 MX 2005PA02740 A1 A1 US 2006148881 US 2006160881 PRIORITY APPLN. INFO.: 20060720 US 2006-372716 US 2002-410169P P 20020912 US 2003-659193 A 20030910 WO 2003-US28296 W 20030911

OTHER SOURCE(S): MARPAT 140:287394

Page 116

ANSWER 12 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

The title compds. (I; Rl1, Rl, R2 = H, halo, CN, carboxamido, etc.; R3 = H, alkyl; m = 1-3; n = 1-2; p = 0-3 (with the proviso that when p = 0, both m and n may not be 2); Q = II-IV (R4-R7 = H, halo, CN, etc.; X = 0.0)

O, S; R8 = H, alkyl)]; useful for the treatment of depression (including but not limited to major depressive disorder, childhood depression and dysthymia), anxiety, panic disorder, post-traumatic stress disorder, premenstrual dysphoric disorder (also known as premenstrual syndrome), attention deficit disorder (with and without hyperactivity), obsessive compulsive disorder, social anxiety disorder, peneralized anxiety disorder, obesity, eating disorders such as anorexia nervosa and bulimia nervosa, vasomotor flushing, occaine and alc. addiction, sexual dysfunction and related illnesses, were prepared Thus, reacting ([2R)-8-methoxy-2_3-dihydro-1,4-benzodioxin-2-yl]methyl 4-methylbenzenesulfonate with cis-3-(5-fluoro-1H-indol-3-yl)cyclopentylamine (preparation given) in DMSO afforded 48% N-[(cis)-3-(5-fluoro-1H-indol-3-yl)cyclopentyl)-N-([(2S)-8-methoxy-2,3-dihydro-1,4-benzodioxin-2-yl]methyllamine. The latter was separated two NR8. into

dihydro-1,4-benzodioxin-2-yl]methyl]amine. The latter was separates two diastereoisomers and biol. data (5-HT transporter affinity, 5-HT1A receptor affinity, and antagonistic activity at 5-HT1A receptors we tested) were given for the mixture and both separated isomers. The pharmaceutical composition comprising the compound I is claimed. 675831-47-7P 675831-54-80-8P 675831-35-3P 675831-51-3P 675831-51-3P 675831-53-6P 675831-55-6P 675831-55-9P 675831-55-6P 675831-55-9P 675831-56-9P 675831-60-4P 675831-55-1P 675831-60-4P 675831-60-4P 675831-75-1P 675831-65-2P IT 675831-76-2P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (preparation of antidepressant cycloalkylamine derivs. of 2,3-dihydro-1,4-benzodioxane)

ANSWER 12 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) yl|cyclopenty|-2,3-dihydro-8-methoxy-, monohydrochloride, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

675831-51-3 CAPLUS 1,4-Benzodioxin-2-methanamine, N-[{1R,3R}-3-{5-fluoro-1H-indol-3-yl)cyclopentyl]-2,3-dihydro-8-methoxy-, (28)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

675831-52-4 CAPLUS
1,4-Benzodioxin-2-methanamine, N-{(15,38)-3-(5-fluoro-1H-indol-3-yl)cyclopentyl}-2,3-dihydro-8-methoxy-, (28)- (CA INDEX NAME)

675831-53-5 CAPLUS
1,4-Benzodioxin-2-methanamine, N-[(1R,3R)-3-(5-fluoro-1H-indol-3-yi)cyclopentyl]-2,3-dihydro-8-methoxy-, hydrochloride, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

ANSWER 12 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) 675831-47-7 CAPLUS 1,4-Benzodioxin-2-methanamine, N-{(1S,3R)-3-(5-fluoro-1H-indol-3-y1)cyclopenty1}-2,3-dihydro-8-methoxy-, (2S)- (CA INDEX NAME) (Continued)

Absolute stereochemistry. Rotation (-).

675831-48-8 CAPLUS 1,4-Benzodioxin-2-methanamine, N-{{1R,3S}-3-{5-fluoro-1H-indol-3-yl)cyclopentyl}-2,3-dihydro-8-methoxy-, {2S}- {CA INDEX NAME}

Absolute stereochemistry. Rotation (-).

675831-49-9 CAPLUS 1,4-Benzodioxin-2-methanamine, N-{(1s,3R)-3-(5-fluoro-1H-indol-3-yl)cyclopentyl-2,3-dihydro-8-methoxy-, monohydrochloride, (2s)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

● HC1

675831-50-2 CAPLUS

1,4-Benzodioxin-2-methanamine, N-[(1R,3S)-3-(5-fluoro-1H-indol-3-

ANSWER 12 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

675831-54-6 CAPLUS 1,4-Benzodioxin-2-methanamine, N-[(1S,3S)-3-(5-fluoro-1H-indol-3-yl)cyclopentyl]-2,3-dihydro-8-methoxy-, (2S)-, (2E)-2-butenedioate (9CI) (CA INDEX NAME)

CRN 675831-52-4 CMF C23 H25 F N2 O3

Absolute stereochemistry.

СМ

Double bond geometry as shown.

но2С СО2Н

675831-55-7 CAPLUS 1,4-Benzodioxin-2-methanamine, N-[3-[5-fluoro-1-methyl-1H-indol-3-y])cyclopentyl]-2,3-dihydro-8-methoxy-, monohydrochloride, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 12 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

• HCl

675831-56-8 CAPLUS
1,4-Benzodioxin-2-methanamine, 8-ethoxy-N-[3-(5-fluoro-1H-indol-3-y1)cyclopentyl]-2,3-dihydro-, monohydrochloride, (28)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

675831-57-9 CAPLUS
1H-Indole-5-carbonitrile, 3-{3-{[{(2S)-2,3-dihydro-8-methoxy-1,4-benzodioxin-2-yl]methyl}amino]cyclopentyl}- (CA INDEX NAME)

Absolute stereochemistry.

675831-58-0 CAPLUS 1H-Indole-5-carbonitrile, 3-[3-[{[(2S)-2,3-dihydro-8-methoxy-1,4-

ANSWER 12 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN

• HC1

675831-75-1 CAPLUS
1,4-Benzodioxin-2-methanamine, N-[3-(5-fluoro-1-methyl-1H-indol-3-yl)cyclopentyl)-2,3-dihydro-8-methoxy-, (2S)- (CA INDEX NAME)

675831-76-2 CAPLUS
1,4-Benzodioxin-2-methanamine, 8-ethoxy-N-{3-(5-fluoro-1H-indol-3-yl)cyclopenty1}-2,3-dihydro-, (2S)- (CA INDEX NAME)

REFERENCE COUNT:

FORMAT

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

ANSWER 12 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) benzodioxin-2-y1]methyl]amino]cyclopentyl]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

675831-59-1 CAPLUS
1H-Indole-5-carbonitrile, 3-{3-[[[(2S)-2,3-dihydro-8-methoxy-1,4-benzodioxin-2-yl]methyl]amino]cyclopentyl]-1-methyl- (CA INDEX NAME)

Absolute stereochemistry.

675831-60-4 CAPLUS
1H-Indole-5-carbonitrile, 3-[3-[{[(2S}-2,3-dihydro-8-methoxy-1,4-benzodioxin-2-yl]methyl}amino]cyclopentyl]-1-methyl-, monohydrochloride (SCI) (CA INDEX NAME)

Absolute stereochemistry.

L8 ANSWER 13 OF 26 CAPLUS COPYRIGHT 2007 ACS ON STN
ACCESSION NUMBER: 2004:142899 CAPLUS
DOCUMENT NUMBER: 140:181323
TITLE: PREPARATION ACS ON STN
ACCESSION NUMBER: 2004:142899 CAPLUS
PREPARATION ACCESSION ACS ON STN
ACCESSION NUMBER: 2004:142899 CAPLUS
PREPARATION ACCESSION Preparation of indolesulfonamides as tyrosine kinase inhibitors, in particular insulin-like growth factor receptor (IGF-IR) inhibitors
Dinsmore, Christopher J.; Beshore, Douglas C.;
Bergman, Jeffrey M.; Lindsley, Craig W.
Merck & Co., Inc., USA
PCT Int. Appl., 191 pp.
CODEN: PIXXD2
Patent
English
1

INVENTOR (S):

PATENT ASSIGNEE (S): SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

OTHER SOURCE(S):

PATENT NO.		APPLICATION NO.	DATE			
WO 2004014300 WO 2004014300	A2 20040219	WO 2003-US24393	20030805			
CO, CR, CU, GM, HR, HU, LT, LU, LV,	CZ, DE, DK, DM, ID, IL, IN, IS, MA, MD, MG, MK,	BA, BB, BG, BR, BY, DZ, EC, EE, ES, FI, JP, KE, KG, KR, KZ, MN, MW, MX, MZ, NI,	GB, GD, GE, GH, LC, LK, LR, LS, NO, NZ, OM, PG,			
TT, TZ, UA, RW: GH, GM, KE, KG, KZ, MD, FI, FR, GB,	UG, US, UZ, VC, LS, MW, MZ, SD, RU, TJ, TM, AT, GR, HU, IE, IT,	SE, SG, SK, SL, SY, VN, YU, ZA, ZM, ZW SL, SZ, TZ, UG, ZM, BE, BG, CH, CY, CZ, LU, MC, NL, PT, RO, GN, GQ, GW, ML, MR,	ZW, AM, AZ, BY, DE, DK, EE, ES, SE, SI, SK, TR,			
CA 2493575 AU 2003257170 EP 1534268	A1 20040219 A1 20040225 A2 20050601	CA 2003-2493575 AU 2003-257170 EP 2003-784904	20030805 20030805 20030805			
IE, SI, LT, JP 2006504668	LV, FI, RO, MK, T 20060209	GB, GR, IT, LI, LU, CY, AL, TR, BG, C2, JP 2004-527739 US 2005-523286 US 2002-402482P	EE, HU, SK 20030805 20050203			
		WO 2003-US24393	w 20030805			

CASREACT 140:181323; MARPAT 140:181323

Page 118

ANSWER 13 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

$$(CR^{17}2)m-Y$$

$$(R^{3})q$$

$$(CR^{17}2)m-Z$$

$$(CR^{17}2)m-Z$$

$$0$$

$$0$$

$$R^{2}$$

$$0$$

$$1$$

Title compds. I (wherein Rla, Rlb = independently H, OH and derivs., NH2 and derivs., (un)substituted cyclo/alkyl, aryl, heterocyclyl: R2 = H, OH and derivs., NH2 and derivs., (un)substituted cyclo/alkyl, aryl: R3 = H, halo, (CH2)pOH and derivs., CO2H and derivs., CH:CH2 and derivs., NH2 (CH2)pNH2 and derivs., NHCHO and derivs., NHS(O)oR4, S(O)oR4, S(O)oNH2

(CH2)pNH2 and derivs., NHCHO and derivs., NHS(O)oR4, S(O)oR4, S(O)oR12 and derivs., CN, (CH2)pNH(CH2)pH and derivs., etc.; R4 = {un} substituted cyclo/slkyl, aryl, heterocyclyl; m = 0-6; n = 0-6; q = 0-4; p = 0-6; o = 0-2; and their pharmaceutically acceptable salts, hydrates and stereoisomers! were prepared for inhibiting, modulating and/or regulating signal transduction of both receptor-type and non-receptor type tycosine kinases. For example, I was prepared in 5 steps via substitution of benzenesulfonyl chloride with Rt 5-chloro-lH-indole-2-carboxylate, sulfonation with concentrated H2SO4 in DCM, chlorination with oxalyl chloride in the presence of DCM/DMF, substitution with methylamine hydrochloride in the presence of TEA/DCM, and one-pot amidation with NH3/phenylsulfonyl group deprotection in i-PrOH. I inhibited insulin-like growth factor 1 receptor (IGF-IR) or Insulin receptor kinase with an ICSO ≤ 100 μM. Thus, I and their formulations are useful for treating cancer, diabetes, an autoimmune disorder, a hyperproliferative disorder, aging, acromegaly, and crohn's disease.

IT 660414-09-5P, 5-chloro-3-[[[1-2,3-dihydro-1,4-benzodioxin-2-yllethyl]aminolsulfonyl]-IH-indole-2-carboxamide 660414-20-0P, 5-chloro-3-[[[2,3-dihydro-1,4-benzodioxin-2-ylmethyl)aminolsulfonyl]-IH-indole-2-carboxamide RL: PRC (Pharmacological activity); SPN (Synthetic preparation); USES

ANSWER 13 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN LB (Continued) (Uses) (IGF-1R inhibitor; prepn. of indolesulfonamides as tyrosine kinase

inhibitors)
660414-09-5 CAPLUS
HR-Indole-2-carboxamide, 5-chloro-3-[[[1-(2,3-dihydro-1,4-benzodioxin-2-yl)ethyl]amino|sulfonyl]- (CA INDEX NAME)

660414-20-0 CAPLUS
1H-Indole-2-carboxamide, 5-chloro-3-[[{(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]amino[sulfonyl]- (CA INDEX NAME)

ANSWER 14 OF 26 CAPLUS COPYRIGHT 2007 ACS ON STN SSION NUMBER: 2003:877309 CAPLUS MENT NUMBER: 140:138730

DOCUMENT NUMBER: TITLE:

AUTHOR (S):

140:138730
Synthesis and biological activity of N-Acylated ornithine analogues of daptomycin Hill, Jason; Siedlecki, James; Parr, Tan: Morytko, Michael; Yu, Xiang; Zhang, Yanzhi; Silverman, Jared; Controneo, Nicole; Laganas, Valerie; Li, Tongchuan, Lai, Jan-Ji; Keith, Dennis; Shimer, George; Flnn,

John CORPORATE SOURCE: Cubist Pharmaceuticals Inc., Lexington, MA, 02421,

USA SOURCE:

Bioorganic & Medicinal Chemistry Letters (2003), 13(23), 4187-4191 COODEN: BMCLE8: ISSN: 0960-894X Elsevier Science B.V.

PUBLISHER: DOCUMENT TYPE: LANGUAGE: Journal English N-Acylated ornithine analogs of daptomycin were synthesized and tested

AB for

their antibacterial efficacy. 345643-51-8P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES IT

(Uses)
(synthesis and structure-activity of N-Acylated ornithine analogs of daptomycin as antibacterial agents)
345643-51-8 CAPLUS
Daptomycin, 6-[N5-[(2,3-dihydro-1,4-benzodioxin-2-yl)carbonyl]-Lornithine]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

ANSWER 14 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-C

ANSWER 14 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN

PAGE 2-B

REFERENCE COUNT:

FORMAT

ANSWER 15 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

Title compds. I [R1 = H, A, SO2A: A = alkyl, alkoxyalkyl: D-E = R2C=CR4, R2R3C-CR4R5; R2, R3, R4, R5 = H, A, cycloalkyl, etc.: X1 = (CHR7)g, (CHR7)h-Q-(CHR8)k: Q = O, S, NR6, etc.: R6 = H, A, cycloalkyl: R7, R8, AB

= definition as given for R2-R5; g=1-6; h, k=0-6; p=0-3; E=H, A, cycloalkyl, etc.; G=(un) substituted alkylene: E and G together form (un) substituted mono or bicyclic heterocycle; XZ= definition as given

X1: Z = H, (un)substituted aromatic carbocyle) and their pharmaceutically acceptable salts and formulations were prepared For example,

acceptable salts and formulations were prepared For example,
N-alkyletion
of 4-{4-fluorobenzyl]piperideine with methanesulfonic ester II, e.g.,
prepared from indole-4-carboxylic acid Me ester in 7-steps, afforded the
hydrochloride salt of indole-3-carbonitrile III after work-up. Compds. I
are claimed useful as excitatory amino acid antagonists (no data
provided)
and as 5-HT reuptake inhibitors.

IT 615569-64-7P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
(target compound; preparation of indole-3-carbonitriles as excitatory

(target compound; preparation of indole-3-carbonitriles as excitatory

acid antagonists for the treatment of neurodegenerative diseases)
615569-64-7 CAPLUS
1H-Indole-3-carbonitrile, 5-[3-[{(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]amino]propyl}- (CA INDEX NAME)

Page 120

L8 ANSWER 15 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:637073 CAPLUS
DOCUMENT NUMBER: 139:337888
Preparation of indole-3-carbonitriles as excitatory amino acid antagonists for the treatment of neurodegenerative diseases
INVENTOR(S): Schadt, Oliver: Boettcher, Henning; Leibrock, Joachim:

INVENTOR(S): Joachim;

Schiemann, Kai; Heinrich, Timo; Hoelzemann, Guenter: Van Amsterdam, Christoph; Bartoszyk, Gerd; Seyfried, Christoph Herck Patent G.m.b.H., Germany PCT Int. Appl., 104 pp. CODEN: PIXXD2 Patent German 1

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PAT	ENT						DATE									ATE		
	2003									WO 2	003-	EP38	06		2	0030	411	
WO	2003																	
	₩:						ΑU,											
							DK,											
							IN,											
		LS,	LT,	LU,	LV,	ΜA,	MD,	MG,	MK,	MN,	MW,	ΜX,	ΜZ,	NO,	ΝZ,	OM,	PH,	
		PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,	
		UA,	ŲG,	US,	UΖ,	VC,	VN,	Yυ,	ZA,	ZM,	ZW							
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,	
		KG,	ΚZ,	MD,	Rυ,	TJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	
		FI,	FR,	GB,	GR,	ΗU,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,	
							CM,											
DE	1021	7006			A1		2003	1106		DE 2	002-	1021	7006		2	0020	416	
CA	2482	655			A1		2003	1023		CA 2	003-	2482	655		2	0030	411	
	2003																	
EP	1497	279			A2		2005	0119		EP 2	003-	7204	55		2	0030	411	
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
							RO,											
JP	2005	5233	10		T		2005	0804		JP 2	003-	5840	42		2	0030	411	
US	2005	1539	80		A1		2005	0714		US 2	004-	5111	55		2	0041	014	
RIORITY	APP	LN.	INFO	.:						DE 2	002-	1021	7006		A 2	0020	416	
									,	WO 2	003-	EP38	06	,	w 2	0030	411	

OTHER SOURCE(S): MARPAT 139:337888

L8 ANSWER 15 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)

L8 ANSWER 16 OF 26
ACCESSION NUMBER:
DOCUMENT NUMBER:
1NVENTOR(S):
PATENT ASSIGNEE(S):
SOURCE:
DOCUMENT TYPE:

CAPLUS COPYRIGHT 2007 ACS on STN
2001:453092 CAPLUS
135:61355
Preparation of lipopeptides as antibacterial agents
Print, Jason; Patr, Ian; Morytko, Michael; Siedlecki,
Jim; Yu, Xiang Yang; Silverman, Jared; Keith, Dennis;
Finn, John; Christensen, Dale; Lazarova, Tavetelina;
Watson, Alan D.; Zhang, Yan
Cubist Pharmaceuticals, Inc., USA; et al.
PCT Int. Appl., 202 pp.
CODEN: PIXXD2

DOCUMENT TYPE:
Patent

DOCUMENT TYPE: LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PRI

PA	ENT	NO.			KIN	D	DATE			APP	LICAT	ION	NO.		I	ATE	
											2000-						
	W:										, BG,						
		CR,	Cυ,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES	, FI,	GB,	GD,	GE,	GH,	GM,	HR,
		ΗU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP	, KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,
		LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX	, MZ,	NO,	ΝZ,	PL,	PT,	RO,	RU,
		SD,	SΕ,	SG,	SI,	SK,	SL,	ΤJ,	TM,	TR	, TT,	TZ,	UA,	UG,	US,	υz,	٧N,
			ZA,														
	RW:										, TZ,						
											, LU,						
		ΒJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GW,	ML	, MR,	NE,	SN,	TD,	TG		
CA	2394	350			A1		2001	0621		CA	2000- 2000-	2394	350		2	0001	215
BR	2000	0164	67		A		2002	0827		BR	2000-	1646	7		2	0001	215
											2000-						
											, IT,		LU,	NL,	SE,	MC,	PT,
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL	, TR						
JP	2003	5174	80		T		2003	0527		JP	2001- 2000-	5447	63		2	0001	215
US	2004	0678	78		A1		2004	0408		US	2000-	7379	08		2	0001	215
IN	2000	CAUU	689		A		2005	0311		IN	2000- 2001- 2002-	CA68	В		2	0001	215
AU	7848	12			B2		2006	0629		AU	2001-	3635	7		- 2	0001	215
NO	2002	0028	6/		A		2002	0812		NO	2002~	2887	20		2	0020	617
MA.	2002	PAUG	030		A		2004	0823		MX	2002-	PAGU	30		- 2	0020	61/
AA AA	2002	0021	71150		А		2003	111,		ZA	2002-	2108	460			0020	625
OKIT	APP	LN.	INFO	• •						US	2002- 2002- 1999-	1 / 0 9	468		P 1	9991	215
										US	2000-	2082	22P		P 2	0000	530
										wo	2000-	US34	205		W 2	0001	215

OTHER SOURCE(S): MARPAT 135:61555

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Lipopeptides I [R is -N(B)(X)n-A; B is $X^{+}RY$, H, alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl or heterocyclyl; RY is hydrido, alkyl,

ANSWER 16 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-C

ANSWER 16 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, heterocyclyl or hydroxyl; X, X' are C:O, C:S, C:NH, C:NRX, S:O Or SO2: n is 0 or 1; RX is alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, heterocyclyl, hydroxyl, alkoxy, carboxy or carboalkoxy: A is H, NH2, NHRA, NRARB, heteroaryl, cycloalkyl, heterocyclyl (RA, RB are alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, heterocyclyl (RA, RB are alkyl, alkoryl, alkynyl, aryl, heteroaryl, cycloalkyl, heterocyclyl or carboalkoxyl or when n is 0, then A is P(O) (OR50) RS1, P(O) RS2RS3, or P(O) (OR50) RS3, where RS0-RS3 are alkyl: alternatively B and A may form a 5-7 membered heterocyclic or heteroaryl ring; R1 is defined similarly to R (with provisos); R2 is CH2CR17R18-ring, where R17 and R18 are hydrido, halo, hydroxyl, alkoxy, amino. thio, sulfinyl, sulfonyl, etc. or CR17R18 are CO C (C:S), oxime or hydraxone groupl were prepd. for use as artibacterials. Thus, treating daptomycin with 4-fluorobenzaldehyde and sodium triacetoxyborotycride in dry DMF for 24 h afforded I (R = NHCO) (CH2) 8Ms, R1 = NHCH2CGH4F-4, R2 = CH2COC6H4NH2-0), which showed MIC (S. Aureus) S 1 µg/mL. 345643-51-8P

IT 345643-51-8P
RL: BAC (Biological activity or effector, except adverse): BSU (Biological study, unclassified): SPN (Synthetic preparation): THU (Therapeutic use): BIOL (Biological study): PREP (Preparation): USES (Uses) (preparation of lipopeptides as antibacterial agents)
RN 345643-51-8 CAPLUS (RN-1(2,3-dihydro-1,4-benzodioxin-2-yl)carbonyl]-Lornithine]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

ANSWER 16 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN

PAGE 2-B

(Continued)

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L8 ANSWER 17 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2000:707157 CAPLUS DOCUMENT NUMBER: 133:266860 Preparation of LANGUAGE: FAMILY ACC, NUM. COUNT: PATENT INFORMATION: APPLICATION NO. PATENT NO. KIND DATE W0 2000058301 A1 20001005 W0 2000-FR762 20000327
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IB, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MM, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, CG, CI, CM, GA, GN, GW, MI, MR, NE, SN, TD, TG
FR 2791675 A1 200100106 FR 1999-3936 19990330
FR 2791675 B1 20010504
FR 1999-3936 A 19990330 FR 2791675 PRIORITY APPLN. INFO.:

OTHER SOURCE(S): MARPAT 133:266860

AB Title compds. I [X = H, halo, cyano, Me, methoxy, phenylmethoxy group; R1 = H, Me; R2 = alkanoyl, phenylalkanoyl, methoxyacetyl, cycloalkylcarbonyl, optionally substituted benzoyl, N-phenylcarbamoyl, N-alkylcarbamoyl, N-(2-methoxyethyl)carbamoyl, alkoxycarbonyl, alkylsulfonyl, phenylsulfonyl group; or NR1R2 = 2-oxo-4,5-dihydrooxazolidin-3-yl) were prepared E.g., N-[4-[2-[[(5-fluoro-2,3-dihydro-1,4-benzodioxin-2-

FR 1999-3936

A 19990330

L8 ANSWER 18 OF 26
ACCESSION NOMBER:
DOCUMENT NUMBER:
133:120348
2000:513686 CAPLUS
2000:513686 CAPLUS
133:120348
Preparation of piperidine, tetrahydropyridine and piperazine derivatives as serotonin re-uptake inhibitors and 5-HTIA antagonists
Moltzen, Ejnac Knud: Krog-Jensen, Christian;
Björnholm, Berith
PATENT ASSIGNEE(S):
BOURCE:
CODEN: PIXXP2
PATENT
DOCUMENT TYPE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: Patent English

PA'	TENT	NO.			KIN	D	DATE			APPL	ICAT	ION	NO.		1	DATE	
	2000																
																CR,	
																ID,	
																LV.	
																SG,	
		SK.	SL.	TJ.	TM.	TR.	TT.	TZ.	UA.	UG.	US.	UZ.	VN.	YU.	ZA	ZW	,
	RW:	GH.	GM.	KE.	LS.	MW.	SD.	SL.	SZ.	TZ.	UG.	ZW.	AT.	BE.	CH.	CY,	DE.
		DK,	ĒS,	FI,	FR,	GB,	GR,	IE,	IT.	LU,	MC.	NL.	PT.	SE.		BJ,	
		CG.	CI.	CM.	GA.	GN.	GW.	ML.	MR.	NE.	SN.	TD.	TG				
CA	2361	059			A1		2000	0727		CA 2	000-	2361	059		:	20000	121
EP	1149	087			Al		2001	1031		EP 2	000-	9014	81		:	20000	121
EP	1149	087			В1		2004	0407									
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
							RO										
BR	2000	0090	07		Α		2001	1127		BR 2	000-	9007			- 2	20000	121
TR	2000 2001 2001 2002 7673 2637 2001	0208	9		Т2		2002	0722		TR 2	001-	2089			- 2	20000	121
HU	2001	0050	65		A2		2002	0729		HU 2	001-	5065			:	20000	121
JP	2002	5353	22		T		2002	1022		JP 2	000-	5947	98		:	20000	121
AU	7673	77			B2		2003	1106		AU 2	000-	2278	1		:	20000	121
AT	2637	63			T		2004	0415		AT 2	000-	9014	81		:	20000	121
ZA	2001	0055	48		А		2002	0705		ZA 2	001-	5548			- 2	20010	705
US	2002	1650	13		AI		2002	0321		US 2	001-	9015	85		- 2	20010	709
US	6596 2001	722			В2		2003										
IN	2001	CNOD	981		A		2005			IN 2	001-	CN98	1		- 7	20010	711
	2001															20010	
	2001	0035	38		A		2001	0917								20010	
	1057						2002			BG 2	001-	1057	81		2	20010	803
	2002				AI		2002	1121		US 2	002-	1479	50			9990	516
IORIT	Y APP	LN.	INFO	. :						DK 1	999-	84		•	Α :	9990	122
										WO 2	000-	DK26		,	w :	20000	121
										11e 2	001-	0015	0.5		n 2 .	20010	200

OTHER SOURCE(S): MARPAT 133:120348

ANSWER 17 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) yllmethyllaminolethyllphenyllbenzamide was prepd. by reaction of (5-fluoro-2,3-dihydro-1,4-benzodioxin-2-yl)methyl tosylate (prepn. given) and N-[4-[2-aminoethyl]phenyllbenzamide (prepn. given). Their affinities for D3, D2, and 5-HTIA receptors were detd. 298708-60-8p

RL: BAC (Biological activity or effector, except adverse); BSU

(Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of N-1(aminophenyl)ethylldihydro-1, 4-benzodioxin-2-methanamine derivas and their affinity for D3, D2, and 5-HTIA receptors) RN 298708-60-8 CAPLUS CN 1,4-Benzodioxin-6-carbonitrile, 3-[[[2-(2,3-dihydro-2-oxo-1H-indol-5-yl)ethyl]amino]methyl]-2,3-dihydro- (CA INDEX NAME)

REFERENCE COUNT:

2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ANSWER 18 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

$$R^2$$
 R^1
 R^{14}
 R^{15}
 E^2
 E^3
 R^{16}

The title compds. [I; B = alkylene, alkenylene, alkynylene; X = O, S, CR4RS; Y CR6R7, CR6R7CR8R9, CR6:CR7; X and Y together form a group CR4:CR5, CR4:CR5CR6R7; Z = O, S; W = N, C, CH; the dotted line is an optional bond; R4-R9 = H, halo, CF3, etc.; A = II, III (wherein E1-E3 AB

S, N, etc.; provided that E2 and E1 and/or E3 may not simultaneously be ٥,

or S; R14-R17 = H, halo, CF3, etc.); R1-R3 = H, halo, CF3, etc.) and their

acid addition salts, useful for the treatment of affective disorders, such as

services on psychosis, anxiety disorders including general anxiety disorder, panic disorder, obsessive compulsive disorder, and eating disorders, were prepared Thus, reacting 4-(1-indenyl)butyl methanesul fonate

aneaulronate
with 1-(1,4-benzodioxan-5-yl)piperazine in the presence of K2CO3 in
3-methyl-2-pentanone followed by conversion of the free base to its
oxalate afforded IV.oxalate which showed ICS0 of 1.7 nM against 3H-5-CT

oxalate afforded IV.oxalate which showed IC50 of 1.7 nM against 3H-5-CT binding.

IT 28599-83-9P 285999-84-OP 285999-85-1P 285999-85-2P 285999-86-2P 285999-94-0P 285999-96-6P 285999-94-P 285999-95-3P 285999-96-4P 286000-01-9P 286000-02-OP 286000-03-1P 286000-01-9P 286000-05-3P RI: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of piperidine, tetrahydropyridine and piperazine derivs.

serotonin re-uptake inhibitors and 5-HTIA antagonists)
285999-83-9 CAPLUS
1,4-Benzodioxin-2-carboxamide, 5-{4-{2-(6-chloro-1H-indol-3-y1)ethyl}-1-piperazinyl}-2,3-dihydro- (CA INDEX NAME)

L8 ANSWER 18 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

HN C1
CH2
CH2
N
N
C-NH2

RN 285999-84-0 CAPLUS
CN 1,4-Benzodioxin-2-carboxamide, 5-[4-[2-(6-chloro-lH-indol-3-yl)ethyl]-1-piperazinyl]-2,3-dihydro-N,N-dimethyl- (CA INDEX NAME)

HN C1
CH2
CH2
CH2
N
O
C-NMe2

RN 28599-85-1 CAPLUS
CN 1,4-Benzodioxin-2-amine, 5-[4-[2-(6-chloro-lH-indol-3-yl)ethyl]-1-piperainyl]-2,3-dihydro- (CA INDEX NAME)

L8 ANSWER 18 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continue

HN C1
CH2
CH2
N
N
N
N
NMe2

RN 285999-92-0 CAPLUS
CN 1,4-Benzodioxin-2-carboxamide, 5-[1-[2-(6-chloro-1H-indol-3-yl)ethyl]1,2,3,6-tetrahydro-4-pyridinyl]-2,3-dihydro- (CA INDEX NAME)

RN 285999-93-1 CAPLUS
CN 1,4-Benzodioxin-2-carboxamide, 5-[1-{2-(6-chloro-1H-indol-3-y1)ethyl}-1,2,3,6-tetrahydro-4-pyridinyl]-2,3-dihydro-N,N-dimethyl- (CA INDEX NAME)

L8 ANSWER 18 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 285999-86-2 CAPLUS
CN Acetamide, N-{5-{4-{2-(6-chloro-1H-indol-3-yl)ethyl}-1-piperazinyl}-2,3-dihydro-1,4-benzodioxin-2-yl}- (CA INDEX NAME)

RN 285999-87-3 CAPLUS
CN 1,4-Benzodioxin-2-amine, 5-[4-[2-(6-chloro-lH-indol-3-yl)ethyl]-1piperazinyl)-2,3-dihydro-N,N-dimethyl- (CA INDEX NAME)

L8 ANSWER 18 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CH2
CH2
CH2
CH2
CH2
CH2
CH2

RN 285999-94-2 CAPLUS
CN 1.4-Benzodioxin-2-amine, 5-[1-[2-(6-chloro-1H-indol-3-y1)ethyl]-1,2,3,6-tetrahydro-4-pyridinyl]-2,3-dihydro- (CA IMDEX NAME)

RN 285999-95-3 CAPLUS CN Acetamide, N-[5-]1-[2-(6-chloro-1H-indol-3-yl)ethyl]-1,2,3,6-tetrahydro-4pyridinyl]-2,3-dihydro-1,4-benzodioxin-2-yl)- (CA INDEX NAME)

L8 ANSWER 18 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 285999-96-4 CAPLUS
CN 1,4-Benzodioxin-2-amine, 5-{1-[2-(6-chloro-1H-indol-3-yl)ethyl]-1,2,3,6-tetrahydro-4-pyridinyl]-2,3-dihydro-N,N-dimethyl- (CA INDEX NAME)

.

RN 286000-01-9 CAPLUS
CN 1,4-Benzodioxin-2-carboxamide, 5-[1-[2-(6-chloro-lH-indol-3-yl)ethyl]-4piperidinyl]-2,3-dihydro- (CA INDEX NAME)

L8 ANSWER 18 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 286000-04-2 CAPLUS
CN Acetamide, N-[5-[1-[2-(6-chloro-1H-indol-3-yl)ethyl]-4-piperidinyl]-2,3-dihydro-1,4-benzodioxin-2-yl)- (CA INDEX NAME)

RN 286000-05-3 CAPLUS
CN 1,4-Benzodioxin-2-amine, 5-{1-{2-(6-chloro-1H-indol-3-y1)ethy1}-4-piperidinyl1-2,3-dihydro-N,N-dimethyl- (CA INDEX NAME)

L8 ANSWER 18 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 286000-02-0 CAPLUS
CN 1,4-Benzodioxin-2-carboxamide, 5-{1-[2-(6-chloro-1H-indol-3-y1)ethy1}-4-piperidiny1]-2,3-dihydro-N,N-dimethy1- (CA INDEX NAME)

RN 286000-03-1 CAPLUS
CN 1,4-Benzodioxin-2-amine, 5-[1-[2-(6-chloro-1H-indol-3-yl)ethyl]-4piperidinyl]-2,3-dihydro- (CA INDEX NAME)

L8 ANSWER 18 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

L8 ANSWER 19 OF 26
ACCESSION NUMBER:
1998:300618 CAPLUS
DOCUMENT NUMBER:
129:4651
Preparation of indolealkyl derivatives of benzodioxanmethylamine as antidepressants and antipsychotic agents
INVENTOR(S):
PATENT ASSIGNEE(S):
SOURCE:
DOCUMENT TYPE:

CAPLUS COPYRIGHT 2007 ACS on STN
1998:300618 CAPLUS
1998:300618 CAPLU

DOCUMENT TYPE:

Patent English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. DATE KIND APPLICATION NO. DATE US 5750724 PRIORITY APPLN. INFO.: 19980512 19961030 19961030 US 1996-739912 US 1996-739912 А

OTHER SOURCE(S): MARPAT 129:4651

The title compds. [1; R1, R4, R5 = H, alkyl, alkoxy, etc.; R1 is defined as above and R4R5 are ortho substituted methylenedioxy, ethylenedioxy, or propylenedioxy; R2, R3 = H, alkyl; n = 3-4l and their pharmaceutically acceptable salts, useful in the treatment of depression and related disorders, were prepared Thus, reaction of 3-indolepropionic acid with

ANSWER 19 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

191012-98-3 CAPLUS
1H-Indol-5-ol, 3-[3-[[(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-y])methyl]amino]propyl}- (CA INDEX NAME)

191012-99-4 CAPLUS
1H-Indole-3-propanamine, N-((2,3-dihydro-7-methoxy-1,4-benzodioxin-2-y))methyl- (CA INDEX NAME)

191013-01-1 CAPLUS
1H-Indole-3-butanamine, N-[(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl)methyl]-5-methoxy- (CA INDEX NAME)

191013-02-2 CAPLUS
1,4-Benzodioxin-6-o1, 2,3-dihydro-3-[[[4-(5-methoxy-]H-indol-3-yl]buty]]amino]methyl]- (CA INDEX NAME)

Page 125

ANSWER 19 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
2,3-dihydro-1,4-benzodioxin-2-methanamine.HCl in the presence of
1-hydroxybenzotriacyole and 1,3-diisopropylcarbodiimide in DMF followed by
treatment of the resulting amide with LiAlH4 in THF afforded the title
compd. If which showed ICSO of 3.50 mM against D2 receptor binding and
ICSO of 3.77 nM against 5-HT1A receptor binding.
191012-95-0P 191012-96-1P 191012-97-2P
191012-96-3P 191012-99-4P 191013-01-1P
191013-02-2P 191013-03-3P 191013-04-4P
191013-08-8P 191013-03-3P 191013-04-P
191013-13-5P 191013-13-5P 191013-16-2P
191013-11-3P 191013-13-5P 191013-16-6P
191013-15-7P 191013-18-0P 191013-19-1P
191013-23-7P 191013-24-8P 191013-22-6P
191013-25-0P 191013-27-1P 191013-28-2P
191013-25-0P 191013-30-6P 191013-37-P
191013-35-1P 191013-30-6P 191013-37-P
191013-38-9P 191013-30-9P 191013-37-P
191013-38-9P 191013-30-9P 191013-37-P
191013-38-4P 191013-39-5P 191013-37-P
191013-38-4P 191013-39-5P 191013-70-8P
191013-41-9P 191013-42-0P 191013-71-5P
RL: BAC (Blological activity or effector, except adverse); BSU
logical

(Biological

logical study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of indolealkyl derivs. of benzodioxanmethylamine as antidepressants and antipsychotic agents) 191012-95-0 CAPLUS

1,4-Benzodioxin-6-ol, 2,3-dihydro-3-{[[4-{lH-indol-3-yl}butyl]amino]methyl}- (CA INDEX NAME)

191012-96-1 CAPLUS
1H-Indole-3-propanamine, N-{(2,3-dihydro-1,4-benzodioxin-2-yl)methyl}-5-(phenylmethoxy)- (CA INDEX NAME)

191012-97-2 CAPLUS 1H-Indol-5-ol, 3-{3-[{{2,3-dihydro-1,4-benzodioxin-2-yl)methyl}amino}propyl}- (CA INDEX NAME)

(Continued)

ANSWER 19 OF 26 CAPLUS COPYRIGHT 2007 ACS On STN (Contin 191013-03-3 CAPLUS Methaneaulfonamide, N-[2,3-dihydro-3-[[[4-[]H-indol-3-y]]butyl]amino|methyl|-1,4-benzodioxin-6-yl]- (CA INDEX NAME)

191013-04-4 CAPLUS
1H-Indole-3-propanamine, N-{{2,3-dihydro-1,4-benzodioxin-2-y1}methyl}-5-methoxy- (CA INDEX NAME)

191013-05-5 CAPLUS

1H-Indole-3-propanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-5-fluoro- (CA INDEX NAME)

191013-06-6 CAPLUS Methaneaulfonanide, N-{2,3-dihydro-3-{{{4-(5-methoxy-1H-indol-3-yl)butyl]amino|methyl]-1,4-benzodloxin-6-yl]- (CA INDEX NAME)

191013-07-7 CAPLUS
1,4-Benzodioxin-6-ol, 2,3-dihydro-3-[[[3-(1H-indol-3-yl)propyl]amino]methyl]- (CA INDEX NAME)

ANSWER 19 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

- CH2- NH- (CH2) 3

191013-08-8 CAPLUS
1H-Indole-3-butanamine, N-{{2,3-dihydro-1,4-benzodioxin-2-y1}methy1}-INDEX NAME)

- CH2-NH- (CH2) 4-

191013-09-9 CAPLUS 1H-Indole-3-propanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-y1)methyl]-(CA INDEX NAME)

- сн₂- ин- (сн₂) ₃-

191013-10-2 CAPLUS
1H-Indole-3-butanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-y1)methyl]-5-fluoro- (CA INDEX NAME)

- CH2- NH- (CH2) 4-

191013-11-3 CAPLUS
1H-Indole-3-butanamine, N-[(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl)methyl]-5-fluoro- (CA INDEX NAME)

ANSWER 19 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

191013-19-1 CAPLUS 1H-Indole-3-butanamine, N-[[(2S)-2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

(CH₂) 4

● HCl

191013-20-4 CAPLUS
1,4-Benzodioxin-6-o1, 2,3-dihydro-3-[{[4-(1H-indol-3-yl)buty]]amino]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

CH2-NH- (CH2) 4

● HC1

191013-21-5 CAPLUS
1H-Indole-3-propanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-5(phenylmethoxy)-, monohydrochloride (9CI) (CA INDEX NAME)

0- CH2- Ph

● HC1

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ANSWER 19 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CH2-NH- (CH2)4

191013-13-5 CAPLUS
1H-Indole-3-butanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-5-fluoro-1-methyl- (CA INDEX NAME)

CH2-NH- (CH2)4-

191013-14-6 CAPLUS
1H-Indole-3-butanamine, N-{(2,3-dihydro-1,4-benzodioxin-2-y1)methy1}-5-methoxy- {CA INDEX NAME}

CH2-NH- (CH2) 4

191013-15-7 CAPLUS Methanesulfonamide, N-[2,3-dihydro-3-[[[3-(1-methyl-1H-indol-3-yl)propyl]amino|methyl]-1,4-benzodioxin-6-yl]- (CA INDEX NAME)

сн₂- мн- (сн₂) з

191013-18-0 CAPLUS
1H-Indole-3-butanamine, N-[[(2S)-2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 19 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) 191013-22-6 CAPLUS | 18-Indo-5-01, 3-[3-[(2,3-dihydro-1,4-benzodioxin-2-y])methyl]amino]propyl]-, (2E)-2-butenedioate (2:1) (salt) (9CI) (CA

CM 1

CRN 191012-97-2 CMF C20 H22 N2 O3

CH2-NH- (CH2)3

CM 2

Double bond geometry as shown.

191013-23-7 CAPLUS
1H-Indol-5-ol, 3-[3-[[(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl]methyl]amino[propyl]-, (2E)-2-butenedioate (2:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 191012-98-3 CMF C21 H24 N2 O4

- CH2- NH- (CH2) 3-

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

HO2C E CO2H

ANSWER 19 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN RN 191013-24-8 CAPLUS
CN 1H-Indole-3-propanamine, N-[(2,3-dihydro-7-methoxy-1,4-benzodioxin-2yllmethyl]-5-methoxy-N-methyl-, (2E)-2-butenedioate (2:1) (CA INDEX NAME) CM 1 CRN 191012-99-4 CMF C23 H28 N2 Q4 СН2-- №- Ме (CH₂)₃ CM 2 CRN 110-17-8 CMF C4 H4 O4 Double bond geometry as shown. но2С СО2Н 191013-25-9 CAPLUS
1H-Indol-5-ol, 3-[3-[[(2,3-dihydro-7-hydroxy-1,4-benzodioxin-2-yl)methyl]amino]propyl]-, (2E)-2-butenedioate (2:1) (salt) (9CI) (CA INDEX NAME) CM 1 CRN 191013-00-0 CMF C20 H22 N2 O4 CH2-NH- (CH2) 3 CM 2 ANSWER 19 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) CH2-NH- (CH2) 4 CM 2 Double bond geometry as shown. HO2C E CO2H 191013-28-2 CAPLUS
Methanesulfonamide, N-{2,3-dihydro-3-[{4-{1H-indol-3-y|}buty}]amino]methyl]-1,4-benzodioxin-6-yl}-, (2E)-2-butenedioate (2:1)
(CA INDEX NAME) CM 1 CRN 191013-03-3 CMF C22 H27 N3 O4 S CH2-NH- (CH2) 4 CM 2 CRN 110-17-8 CMF C4 H4 Q4 Double bond geometry as shown. но2с Е со2н 191013-29-3 CAPLUS
1H-Indole-3-propanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-y1)methy1]-5-methoxy-, (2E)-2-butenedioate (2:1) (CA INDEX NAME) CRN 191013-04-4 Page 127

ANSWER 19 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) Double bond geometry as shown. но₂с Е со₂н 191013-26-0 CAPLUS
1H-Indole-3-butanamine, N-{(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl)methyl}-5-methoxy-, (2Z)-2-butenedioate (1:1) (CA INDEX NAME) CH2-NH- (CH2) 4 CM 2 CRN 110-16-7 CMF C4 H4 O4 Double bond geometry as shown. HO₂C CO2H 191013-27-1 CAPLUS
1,4-Benzodioxin-6-ol, 2,3-dihydro-3-{[[4-{5-methoxy-lH-indol-3-yl}butyl]amino]methyl]-, {2E}-2-butenedioate (2:1) (salt) (9CI) (CA INDEX NAMEL CM 1 CRN 191013-02-2 CMF C22 H26 N2 O4 ANSWER 19 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN CMF C21 H24 N2 O3 (Continued) CH2-NH- (CH2) 3 CM 2 CRN 110-17-8 CMF C4 H4 O4 Double bond geometry as shown. но2С Е СО2Н 191013-30-6 CAPLUS
1H-Indole-3-propanamine, N-{(2,3-dihydro-1,4-benzodioxin-2-y1)methyl]-5-fluoro-, (2E)-2-butenedioate (2:1) (CA INDEX NAME) CM 1 CRN 191013-05-5 CMF C20 H21 F N2 O2 CH2-NH- (CH2) 3 CM 2 CRN 110-17-8 CMF C4 H4 O4 Double bond geometry as shown. но2С СО2Н 191013-31-7 CAPLUS Methanesulfonamide, N-[2,3-dihydro-3-[[[4-[5-methoxy-lH-indol-3-yl]buty]]amino]methyl]-1,4-benzodioxin-6-yl]-, (2E)-2-butenedioate (2:1) (CA INDEX NAME) CM 1 CRN 191013-06-6

10-556,931.trn ANSWER 19 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN CMF C23 H29 N3 O5 S (Continued) 2 Double bond geometry as shown. HO2C E CO2H 191013-32-8 CAPLUS
1,4-Benzodioxin-6-ol, 2,3-dihydro-3-[[[3-(1H-indol-3-yl)propyl]amino]methyl]-, (2E)-2-butenedioate (2:1) (salt) (9CI) (CA INDEX NAME) CM 1 CRN 191013-07-7 CMF C20 H22 N2 O3 - CH2- NH- (CH2) 3 CM 2 CRN 110-17-8 CMF C4 H4 O4 Double bond geometry as shown. но₂с СО2Н RN 191013-33-9 CAPLUS ANSWER 19 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) но₂с СО2Н 191013-35-1 CAPLUS
1H-Indole-3-butanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-y1)methy1]-5-fluoro-, (2E)-2-butenedioate (2:1) (CA INDEX NAME) CRN 191013-10-2 CMF C21 H23 F N2 O2 CH2-NH- (CH2) 4 CM 2 Double bond geometry as shown. но2С Е СО2Н 191013-36-2 CAPLUS
1H-Indole-3-butanamine, N-[(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl)methyl]-5-fluoro-, (2E)-2-butenedioate (2:1) (CA INDEX NAME) CM 1 CRN 191013-11-3 CMF C22 H25 F N2 O3 CH2-NH- (CH2)4

ANSWER 19 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) 1H-Indole-3-butanamine, N-[(2,3-dh)ydro-1,4-benzodioxin-2-yl)methyl]-,(2E)-2-butenedioate (2:1) (CA INDEX NAME) CM 1 CRN 191013-08-8 CMF C21 H24 N2 O2 2 CM Double bond geometry as shown. ^E co₂H HO2C 191013-34-0 CAPLUS 1H-Indole-3-propanamine, N-{(2,3-dihydro-1,4-benzodioxin-2-yl)methyl}-, (2E)-2-butenedioate (2:1) {CA INDEX NAME} CM 1 CRN 191013-09-9 CMF C20 H22 N2 O2 CH2-NH+ (CH2) 3 CM 2 CRN 110-17-8 CMF C4 H4 O4 Double bond geometry as shown. ANSWER 19 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) HO2C 191013-37-3 CAPLUS 1,4-Benzodioxin-6-ol, 2,3-dihydro-3-[[[3-(1H-indol-3-yl)propyl]amino]methyl]-, (3S)- (CA INDEX NAME)

Absolute stereochemistry.

191013-38-4 CAPLUS
1,4-Benzodioxin-6-ol, 2,3-dihydro-3-{{[3-{1H-indol-3-y|}propyl]amino|methyl]-, (3S}-, (2E)-2-butenedioate (2:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 191013-37-3 CMF C20 H22 N2 O3

Absolute stereochemistry.

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

191013-39-5 CAPLUS Methaneaufonamide, N-[(3S)-2,3-dihydro-3-[[[3-[1H-indol-3-yl]propyl]amino]methyl]-1,4-benzodioxin-6-yl]- (CA INDEX NAME)

Absolute stereochemistry.

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Double bond geometry as shown.

ANSWER 19 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

191013-40-8 CAPLUS
Methanesulfonamide, N-[(3S)-2,3-dihydro-3-[([3-{1H-indol-3-yl]propyl]amino|methyl]-1,4-benzodioxin-6-yl]-, (2E)-2-butenedioate (2:1)
(CA INDEX NAME)

CM 1

CRN 191013-39-5 CMF C21 H25 N3 O4 S

Absolute stereochemistry.

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

191013-41-9 CAPLUS
1H-Indole-3-butanamine, N-{(2,3-dihydro-1,4-benzodioxin-2-y1)methy1}-5-fluoro-1-methy1-, (2E)-2-butenedioate (2:1) (CA INDEX NAME)

ANSWER 19 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

191013-71-5 CAPLUS
1H-Indole-3-butanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-5-methoxy-, (2E)-2-butenedioate (2:1) (CA.INDEX NAME)

CM 1

CRN 191013-14-6 CMF C22 H26 N2 O3

CH2-NH- (CH2)4

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

191013-44-2P 191013-45-3P 191013-46-4P
191013-47-5P 191013-48-6P 191013-49-7P
191013-50-0P 191013-51-1P 191013-52-2P
191013-53-3P 191013-54-4P 191013-55-5P
191013-55-6P 191013-54-4P 191013-58-8P
191013-59-9P 191013-60-2P 191013-61-3P
191013-62-4P 191013-60-2P 191013-61-3P
191013-62-4P 191013-63-5P
RL: RCT (Reactant): SPN (Synthetic preparation): PREP (Preparation): RACT (Reactant or reagent)
(Preparation of indolealkyl derivs. of benzodioxanmethylamine as antidepressants and antipsychotic agents)
191013-44-2 CAPLUS
1H-Indole-3-butanamide, N-[[(2S)-2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl]methyl]- (CA INDEX NAME) IT

Absolute stereochemistry.

ANSWER 19 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

191013-42-0 CAPLUS
Methanesulfonamide, N-[2,3-dihydro-3-[[[3-(1-methyl-1H-indol-3-yl)propyl]amino]methyl]-1,4-benzodioxin-6-yl]-, (2E)-2-butenedioate (2:1)
(CA INDEX NAME)

CRN 191013-15-7 CMF C22 H27 N3 O4 S

Double bond geometry as shown.

ANSWER 19 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

191013-45-3 CAPLUS
1H-Indole-3-butanamide, N-[(2,3-dihydro-7-hydroxy-1,4-benzodioxin-2-yl)methyl]- (CA INDEX NAME)

191013-46-4 CAPLUS 1H-Indole-3-propanamide, N-{(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-5-(phenylmethoxy)- (CA INDEX NAME)

191013-47-5 CAPLUS

lH-Indole-3-propanamide, N-[(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl)methyl)-5-(phenylmethoxy)- (CA INDEX NAME)

L8 ANSWER 19 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 191013-48-6 CAPLUS
CN 1H-Indole-3-propanamine, N-{(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-y1)methy1}-5-(phenylmethoxy)-, monohydrochloride (9CI) (CA INDEX NAME)

● HC1

RN 191013-49-7 CAPLUS
CN lH-Indole-3-propanamide, N-[(2,3-dihydro-7-hydroxy-1,4-benzodioxin-2-yl)methyll-5-hydroxy- (CA INDEX NAME)

RN 191013-50-0 CAPLUS
CN 1H-Indole-3-butanamide, N-[(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl)methyl]-5-methoxy- (CA INDEX NAME)

L8 ANSWER 19 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 191013-54-4 CAPLUS
CN 1H-Indole-3-propanaide, N-[{2,3-dihydro-7-hydroxy-1,4-benzodioxin-2-yl}methyl]- (CA INDEX NAME)

RN 191013-55-5 CAPLUS
CN 1H-Indole-3-butanamide, N-[(2,3-dihydro-1,4-benzodioxin-2-y1)methyl](CA
INDEX NAME)

RN 191013-56-6 CAPLUS
CN 1H-Indole-3-propanamide, N-{(2,3-dihydro-1,4-benzodioxin-2-y1)methy1}(CA INDEX NAME)

L8 ANSWER 19 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 191013-51-1 CAPLUS
CN 1H-Indoi-3-butanamide, N-[(2,3-dihydro-7-hydroxy-1,4-benzodioxin-2-yl)methyl)-5-methoxy- (CA INDEX NAME)

RN 191013-52-2 CAPLUS
CN 1H-Indole-3-butanamide, N-[[2,3-dihydro-7-[(methylsulfonyl)amino]-1,4-benzodioxin-2-y-l)methyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

RN 191013-53-3 CAPLUS
CN 1H-Indole-3-butanamide, N-{{2,3-dihydro-7-[(methylsulfonyl)amino]-1,4-benzodioxin-2-yl]methyl}-5-methoxy- (CA INDEX NAME)

L8 ANSWER 19 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 191013-57-7 CAPLUS
CN HH-Indole-3-butanamide, N-{(2,3-dihydro-1,4-benzodioxin-2-y1)methy1}-5fluoro- (CA INDEX NAME)

RN 191013-58-8 CAPLUS
CN 1H-Indole-3-butanamide, N-[(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl)methyll-5-fluoro- (CA INDEX NAME)

RN 191013-59-9 CAPLUS
CN 1H-Indole-3-propanamide,
N-{[(2S)-2,3-dihydro-7-hydroxy-1,4-benzodioxin-2y1]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 19 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

191013-60-2 CAPLUS
1H-Indole-3-propanamide, N-[[(2S)-2,3-dihydro-7-[(methylaulfonyl)amino]-1,4-benzodioxin-2-yl]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

191013-61-3 CAPLUS
1H-Indole-3-butanamide, N-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-5-fluoro-1-methyl- (CA INDEX NAME)

191013-62-4 CAPLUS 1H-Indole-3-butanamide, N-[(2,3-dihydro-1,4-benzodioxin-2-y1)methy1)-5-methoxy- (CA INDEX NAME)

ANSWER 20 OF 26 CAPLUS COPYRIGHT 2007 ACS ON STN SSION NUMBER: 1997:429564 CAPLUS MENT NUMBER: 127:50651 ACCESSION NUMBER:

DOCUMENT NUMBER:

127:50651

Preparation of indolylalkylaminomethylbenzodioxans as 5-HT1A receptor ligands for treatment of depression and related disorders.

Kang, Young Hee; Stack, Gary Paul American Home Products Corporation, USA PCT Int. Appl., 42 pp.

CODEN: PIXXD2

Patent TITLE:

INVENTOR (S) PATENT ASSIGNEE (S):

SOURCE:

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BG, BR, CA, CN, C2, EE, GE, HU, IL, IS, JP, KP, KR,
LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR,
AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,
MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML,
TD, TG
AI 19970515 CA 1996-2236678 19961029
A 19970529 AU 1996-75245 19961029
B2 19990415
A1 19980902 EP 1996-937782 19961029
B1 20011212
DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT. MO 9717343 W: AL, AU, BB, LK, LR, LT, UA, UZ, VN, RW: KE, LS, MM, IE, IT, LU, MR, NE, SN, CA 2236678 AU 9675245 AU 704216 EP 861248 EP 861248 EP 861248 ER AT, BE, CH, WO 9717343 EP #61248 B1 20011212
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO
BR 9611406 A 19990105 BR 1996-11406 19961029
CN 1205700 A 19990120 CN 1996-199286 19961029
CN 1074414 B 20011107
JP 20005300136 T 20000111 JP 1997-518222 19961029 JP 1997-518222 HU 1999-2091 19961029 19961029 HU 9902091 HU 9902091 IL 124095 AT 210659 ES 2166470 A2 A3 A T 20000228 20000328 19961029 19961029 19961029 19961101 19961105 20011031 20011215 IL 1996-124095 IL 1996-124095 AT 1996-937782 ES 1996-937782 ZA 1996-9221 TW 1996-85113500 HK 1999-100444 US 1995-7284P **T**3 20020416 ZA 9609221 TW 498075 19980504 20020811 HK 1015366 PRIORITY APPLN. INFO.: Al P 19951106 WO 1996-US17275 W 19961029

OTHER SOURCE(S): MARPAT 127:50651

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ANSWER 19 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

191013-63-5 CAPLUS HH-Indole-3-propanamide, N-[[2,3-dihydro-7-[{methylsulfonyl}amino]-1,4-benzodioxin-2-yl}methyl]-1-methyl- (CA INDEX NAME)

REFERENCE COUNT: THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

L8 ANSWER 20 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

Title compds. (I; R1, R4 R5 = H, alkyl, alkoxy, aralkoxy, alkanoyloxy,

Title compds. (1; R1, R4 R5 = H, alkyl, alkoxy, aralkoxy, alkanoyloxy, halo, CF3, amino, alkanamido, alkanesulfonamido; R4R5 = ortho substituted methylanedioxy, ethylenedioxy, propylenedioxy; R2, R3 = H, alkyl; n = 3, 4), were prepared Thus, 2,3-dihydro-1,4-benzodioxin-2-methanamine hydrochloride was heated with 5-methoxy-3-(3-bromopropyl)indole and disopropylethylamine in DMF at 80° to give (2,3-dihydrobenzo[1,4]dioxin-2-ylmethyl]-3[3,5-methoxy-IH-indol-3-yllpropyl]amine. The latter showed 5-HT1A receptor affinity with IC50 = 0.10 nM for displacement of [3H]-8-OHDPAT.
191012-94-9P 191012-95-0P 191012-96-PAP
191012-07-2P 191012-98-3P 191012-99-PP
191013-00-0P 191013-01-1P 191013-02-2P
191013-03-1P 191013-04-4P 191013-03-5P
191013-03-PP 191013-10-2P 191013-11-3P
191013-12-4P 191013-13-5P 191013-11-3P
191013-27-1P 191013-21-5P 191013-12-5P
191013-20-4P 191013-21-5P 191013-13-5P
191013-20-3P 191013-31-8-0P 191013-22-5P
191013-28-3P 191013-31-6P 191013-31-7P
191013-28-3P 191013-33-9P 191013-31-7P
191013-38-4P 191013-33-9P 191013-31-7P
191013-38-4P 191013-33-5P 191013-31-7P
191013-38-4P 191013-31-6P 191013-31-5P
191013-38-4P 191013-31-6P 191013-71-5P
RL: BBC (Biological activity or effector, except adverse); BSU

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

logical
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of indely|slkylaminomethylbenzodioxans as 5-HTIA receptor
ligands for treatment of depression and related disorders)
191012-94-9 CAPLUS
HI-Indole-3-butanamine, N-[(2,3-dihydro-7-methoxy-1,4-benzodioxin-2yl)methyl)- (CA INDEX NAME)

191012-95-0 CAPLUS 1,4-Benzodioxin-6-01, 2,3-dihydro-3-[([4-(1H-indol-3-yl)butyl]amino]methyl]- (CA INDEX NAME)

1H-Indole-3-propanamine, N-((2,3-dihydro-1,4-benzodioxin-2-yl)methyl)-5-

ANSWER 20 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (phenylmethoxy) - (CA INDEX NAME)

191012-97-2 CAPLUS
1H-Indol-5-ol, 3-{3-{{(2,3-dihydro-1,4-benzodioxin-2-yl)methyl}amino}propyl}- (CA INDEX NAME)

191012-98-3 CAPLUS
1H-Indol-5-ol, 3-[3-[{{2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl)methyl}amino[propyl]- (CA INDEX NAME)

1H-Indole-3-propanamine, N-{(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl)methyl}-5-methoxy-N-methyl- (CA INDEX NAME)

191013-00-0 CAPLUS
IH-Indol-5-01, 3-[3-[[(2,3-dihydro-7-hydroxy-1,4-benzodioxin-2-yl]methyl]amino]propyl]- (CA INDEX NAME)

ANSWER 20 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN

191013-05-5 CAPLUS
1H-Indole-3-propanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-y1)methy1]-5-fluoro- (CA INDEX NAME)

191013-06-6 CAPLUS ·
Methaneaulfonamide, N-{2,3-dihydro-3-{[[4-{5-methoxy-lH-indol-3-y1}buty1]amino|methy1}-1,4-benzodioxin-6-y1}- (CA INDEX NAME)

191013-07-7 CAPLUS
1,4-Benzodioxin-6-01, 2,3-dihydro-3-[[[3-{IH-indol-3-yl}propyl]amino]methyl]- (CA INDEX NAME)

191013-08-8 CAPLUS 1H-Indole-3-butanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-y1)methyl]-INDEX NAME)

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ANSWER 20 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN

191013-01-1 CAPLUS
1H-Indole-3-butanamine, N-[(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl)methyl]-5-methoxy- (CA INDEX NAME)

191013-02-2 CAPLUS
1,4-Benzodioxin-6-o1, 2,3-dihydro-3-[[[4-(5-methoxy-1H-indol-3-yl)butyl]butyl]butyl]butyl]butyl

191013-03-3 CAPLUS
Methanesulfonmide, N-[2,3-dihydro-3-{[[4-(1H-indol-3y])butyllamino|methyl]-1,4-benzodioxin-6-yl}- (CA INDEX NAME)

191013-04-4 CAPLUS 1H-Indole-3-propanamine, N-((2,3-dihydro-1,4-benzodioxin-2-y1)methyl)-5-methoxy- (CA INDEX NAME)

ANSWER 20 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) 191013-09-9 CAPLUS HI-Hodole-3-propanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl)-(CA INDEX NAME)

191013-10-2 CAPLUS
IH-Indole-3-butanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-y1)methyl]-5-fluoro- (CA INDEX NAME)

191013-11-3 CAPLUS 1H-Indole-3-butenamine, N-{(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl)methyl)-5-fluoro- (CA INDEX NAME)

191013-12-4 CAPLUS Methanesulfonamide, N-[2,3-dihydro-3-[[[3-[1H-indol-3-yl)propyl]amino]methyl]-1,4-benzodioxin-6-yl]- (CA INDEX NAME)

191013-13-5 CAPLUS
1H-Indole-3-butanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-5-fluoro-1-methyl- (CA INDEX NAME)

ANSWER 20 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CH2-NH- (CH2)4

191013-14-6 CAPLUS IH-Indole-3-butanamine, N-{(2,3-dihydro-1,4-benzodioxin-2-y1)methyl]-5-methoxy- (CA INDEX NAME)

- CH2- NH- (CH2) 4

191013-15-7 CAPLUS Methaneaulfonanide, N-[2,3-dihydro-3-[[[3-(1-methyl-1H-indol-3-yl)propyl]amino|methyl]-1,4-benzodioxin-6-yl]- (CA INDEX NAME)

CH2-NH- (CH2) 3

191013-18-0 CAPLUS
1H-Indole-3-butanamine, N-[{{2S}-2,3-dihydro-7-methoxy-1,4-benzodioxin-2-y1|methy1}- (CA INDEX NAME)

191013-19-1 CAPLUS
1H-Indole-3-butanamine, N-[[(2S)-2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl]methyl]-, monohydrochloride (9CI) {CA INDEX NAME}

ANSWER 20 OF 26 CAPLUS COPYRIGHT 2007 ACS ON STN CMF C20 H22 N2 O3 (Continued)

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

191013-23-7 CAPLUS lh-Indol-5-ol, 3-[3-[{(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl)methyl|amino|propyl}-, (2E)-2-butenedioate (2:1) (selt) (9CI) (CA INDEX NAME)

CM 1

CRN 191012-98-3 CMF C21 H24 N2 O4

CM 2

Double bond geometry as shown.

RN 191013-24-8 CAPLUS
CN 1H-Indole-3-propanamine, N-[(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-y1)methyl]-5-methoxy-N-methyl-, (2E)-2-butenedioate (2:1) (CA INDEX NAME)

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L8 ANSWER 20 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

Absolute stereochemistry.

191013-20-4 CAPLUS
1,4-Benzodioxin-6-ol, 2,3-dihydro-3-{[[4-{1H-indol-3-yl}butyl]amino]methyl]-, monohydrochloride {9CI} (CA INDEX NAME)

191013-21-5 CAPLUS
1H-Indole-3-propanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-5(phenylmethoxy)-, monohydrochloride (9CI) (CA INDEX NAME)

191013-22-6 CAPLUS
1H-Indol-5-ol, 3-[3-{[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]amino]propyl}-, (2E)-2-butenedioate (2:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 191012-97-2

ANSWER 20 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN CRN 191012-99-4 CMF C23 H28 N2 O4 (Continued)

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

191013-25-9 cxpLUs
H-Indol-5-ol, 3-[3-[[(2,3-dihydro-7-hydroxy-1,4-benzodioxin-2-yl)methyl]amino]propyl]-, (2E)-2-butenedioate (2:1) (salt) (9CI) (CA

CM 1

CRN 191013-00-0 CMF C20 H22 N2 O4

CM 2

Double bond geometry as shown.

но2С Е СО2Н

191013-26-0 CAPLUS 1H-Indole-3-butanamine, N-[(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-

```
ANSWER 20 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) y1)methy1]-5-methoxy-, (2Z)-2-butenedioate (1:1) (CA INDEX NAME)
                                                                                                                                                ANSWER 20 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
                                                                                                                                                   Е со2н
        CRN 191013-01-1
CMF C23 H28 N2 O4
                                                                                                                                                  191013-28-2 CAPLUS Methanesulfonamide, N-[2,3-dihydro-3-[[[4-(lH-indol-3-y])butyl]amino]methyl]-1,4-benzodioxin-6-yl]-, (2E)-2-butenedioate (2:1) (CA INDEX NAME)
                                                                                                                                                  CM 1
        CM
                                                                                                                                                                             CH2-NH- (CH2) 4
Double bond geometry as shown.
 HO2C
                                                                                                                                                  CM 2
               со2н
                                                                                                                                                  CRN 110-17-8
CMF C4 H4 O4
RN 191013-27-1 CAPLUS
CN 1,4-Benzodioxin-6-01, 2,3-dihydro-3-{{{4-{5-methoxy-1H-indol-3-yl}buty|}amino|methyl}-, (2E)-2-butenedioate (2:1) (salt) (9CI) (CA INDEX
                                                                                                                                           Double bond geometry as shown.
                                                                                                                                          но2с Е со2н
        NAME)
        CM 1
                                                                                                                                                  191013-29-3 CAPLUS
1H-Indole-3-propanamine, N-((2,3-dihydro-1,4-benzodioxin-2-yl)methyl)-5-methoxy-, (2E)-2-butenedioate (2:1) (CA INDEX NAME)
        CRN 191013-02-2
CMF C22 H26 N2 O4
                                                                                                                                                  CM 1
                         CH2-NH- (CH2) 4
                                                                                                                                                  CRN 191013-04-4
CMF C21 H24 N2 O3
                                                                                                                                                              CH2-NH- (CH2) 3
        CM 2
         CRN 110-17-8
CMF C4 H4 O4
 Double bond geometry as shown.
        ANSWER 20 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN CM \, 2
                                                                                                                                          L8 ANSWER 20 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
                                                                                            (Continued)
                                                                                                                                                  CM 2
                                                                                                                                                  CRN 110-17-8
CMF C4 H4 O4
Double bond geometry as shown.
HO2C E CO2H
                                                                                                                                           Double bond geometry as shown.
                                                                                                                                           но2С Е СО2Н
        191013-30-6 CAPLUS
1H-Indole-3-propanamine, N-{(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-5-fluoro-, (2E)-2-butenedioate (2:1) (CA INDEX NAME)
                                                                                                                                                  191013-32-8 CAPLUS
1,4-Benzodioxin-6-ol, 2,3-dihydro-3-[[[3-(1H-indol-3-yl)propyl]amino]methyl]-, (2E)-2-butenedioate (2:1) (salt) (9CI) (CA INDEX NAME)
        CRN 191013-05-5
CMF C20 H21 F N2 O2
                                                                                                                                                  CM 1
                                                                                                                                                  CRN 191013-07-7
CMF C20 H22 N2 O3
        CRN 110-17-8
CMF C4 H4 O4
                                                                                                                                                  CM 2
 Double bond geometry as shown.
                                                                                                                                                   CRN 110-17-8
CMF C4 H4 O4
но2С СО2Н
                                                                                                                                           Double bond geometry as shown.
        191013-31-7 CAPLUS Methanesulfonamide, N-[2,3-dihydro-3-[[[4-[5-methoxy-1H-indol-3-yl]butyl]amino]methyl]-1,4-benzodioxin-6-yl]-, (2E)-2-butenedioate (2:1) (CA INDEX NAME)
                                                                                                                                                     <sup>E</sup> CO2H
                                                                                                                                           HO2C
                                                                                                                                                  191013-33-9 CAPLUS
1H-Indole-3-butanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-y1)methyl]-, (ZE)-2-butenedioate (2:1) (CA INDEX NAME)
        CM 1
                                                                                                                                                  CRN 191013-08-8
CMF C21 H24 N2 O2
                                          NH- (CH2) 4
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(Continued)

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ANSWER 20 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

но2С СО2Н

191013-34-0 CAPLUS HH-Indole-3-propanamine, N-{(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-, (2E)-2-butenedioate (2:1) (CA INDEX NAME)

CM 1

CRN 191013-09-9 CMF C20 H22 N2 O2

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

HO2C E CO2H

 $\begin{array}{lll} 191013-35-1 & \text{CAPLUS} \\ 1\text{H-Indole-3-butanamine}, & \text{N-}\{\{2,3-\text{dihydro-1},4-\text{benzodioxin-2-y1}\}\text{methy1}\}-5-\text{fluoro-}, & (2\text{E})-2-\text{butenedioate} & (2\text{E}) & (\text{CA INDEX NAME}) \\ \end{array}$

CM 1

CRN 191013-10-2 CMF C21 H23 F N2 O2

ANSWER 20 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

(CH₂)₃

191013-38-4 CAPLUS 1,4-Benzodioxin-6-ol, 2,3-dihydro-3-{[[3-{||H-indol-3-y||propyl|amino||methyl}-, {3S}-, {2E}-2-butenedioate {2:1} {salt} {9CI} {CA INDEX NAME}

CRN 191013-37-3 CMF C20 H22 N2 O3

Absolute stereochemistry.

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

HO2C E CO2H

191013-39-5 CAPLUS
Methanesulfonamide, N-[(3S)-2,3-dihydro-3-[{[3-(1H-indol-3-yl)propyl]amino]methyl]-1,4-benzodioxin-6-yl}- (CA INDEX NAME)

Absolute stereochemistry.

191013-40-8 CAPLUS
Methanesulfonamide, N-[(3S)-2,3-dihydro-3-[{[3-(1H-indol-3-yl)propyl]amino]methyl]-1,4-benzodioxin-6-yl}-, (2E)-2-butenedioate (2:1) (CA INDEX NAME)

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ANSWER 20 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

но2с € со2н

191013-36-2 CAPLUS
lK-Indole-3-butanamine, N-[(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl)methyl)-5-fluoro-, (2E)-2-butenedioate (2:1) (CA INDEX NAME)

CRN 191013-11-3 CMF C22 H25 F N2 O3

CH2-NH- (CH2) 4

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

но2с СО2Н

191013-37-3 CAPLUS
1,4-Benzodioxin-6-ol, 2,3-dihydro-3-[[[3-(1H-indol-3-yl)propyl]amino]methyl]-, (3S)- (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 20 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 1

CRN 191013-39-5 CMF C21 H25 N3 O4 S

Absolute stereochemistry.

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

HO2C E CO2H

191013-41-9 CAPLUS
IH-Indole-3-butanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-y1)methyl]-5-fluoro-1-methyl-, (2E)-2-butenedioate (2:1) (CA INDEX NAME)

CM 1

CRN 191013-13-5 CMF C22 H25 F N2 O2

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

но2С СО2Н

ANSWER 20 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN

191013-42-0 CAPLUS Methanesulfonamide, N-[2,3-dihydro-3-[{[3-{1-methyl-1H-indol-3-yl)propyl]amino]methyl}-1,4-benzodioxin-6-yl)-, (2E)-2-butenedioate (2:1) (CA INDEX NAME)

(Continued)

CM 1

CRN 191013-15-7 CMF C22 H27 N3 O4 S

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

191013-71-5 CAPLUS
1H-Indole-3-butanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-5-methoxy-, (2E)-2-butenedioate (2:1) (CA INDEX NAME)

CRN 191013-14-6 CMF C22 H26 N2 O3

ANSWER 20 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

191013-46-4 CAPLUS
1H-Indole-3-propanamide, N-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-5(phenylmethoxy)- (CA INDEX NAME)

191013-47-5 CAPLUS HH-Indole-3-propanamide, N-[(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl)methyl)-5-(phenylmethoxy)- (CA INDEX NAME)

191013-46-0 CARDOS (1910114-10

• HCl

191013-49-7 CAPLUS
1H-Indole-3-propanamide, N-{(2,3-dihydro-7-hydroxy-1,4-benzodioxin-2-y1}methy1)-5-hydroxy- (CA INDEX NAME)

ANSWER 20 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

191013-44-2P 191013-45-3P 191013-46-4P
191013-47-5P 191013-48-6P 191013-49-7P
191013-50-0P 191013-51-1P 191013-52-2P
191013-53-3P 191013-54-4P 191013-55-5P
191013-56-6P 191013-54-4P 191013-55-8P
191013-56-6P 191013-60-2P 191013-61-3P
191013-62-4P 191013-60-2P 191013-61-3P
191013-62-4P 191013-60-2P 191013-61-3P
(Reactant or reagent)
(Reactant or reagent)
(preparation of indolylalkylaminomethylbenzodioxans as 5-HTIA receptor ligands for treatment of depression and related disorders)
191013-44-2 CAPLUS
1H-Indole-3-butanamide, N-[(2S)-2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

191013-45-3 CAPLUS 1H-Indole-3-butanamide, N-[{2,3-dihydro-7-hydroxy-1,4-benzodioxin-2-yl)methyl- (CA INDEX NAME)

ANSWER 20 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

191013-50-0 CAPLUS
1H-Indole-3-butanamide, N-[(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl)methyl]-5-methoxy- (CA INDEX NAME)

191013-51-1 CAPLUS 1H-Indole-3-butanamide, N-[(2,3-dihydro-7-hydroxy-1,4-benzodioxin-2-yl)methyl]-5-methoxy- (CA INDEX NAME)

191013-52-2 CAPLUS
1H-Indole-3-butanamide, N-[[2,3-dihydro-7-[(methylaulfonyl)amino]-1,4-benzodioxin-2-yl]methyl}- (CA INDEX NAME)

L8 ANSWER 20 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 191013-53-3 CAPLUS
CN 1H-Indole-3-butanamide, N-[[2,3-dihydro-7-[(methylsulfonyl)amino]-1,4-benzodioxin-2-yl]methyl]-5-methoxy- (CA INDEX NAME)

RN 191013-54-4 CAPLUS
CN HH-Indole-3-propananide, N-[{2,3-dihydro-7-hydroxy-1,4-benzodioxin-2-y1)methyll- (CA INDEX NAME)

RN 191013-55-5 CAPLUS
CN 1H-Indole-3-butanamide, N-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-

(CA INDEX NAME)

L8 ANSWER 20 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 191013-59-9 CAPLUS CN 1H-Indole-3-propanamide, N-[[(25)-2,3-dihydro-7-hydroxy-1,4-benzodioxin-2y1]methyl)- (CA INDEX NAME)

Absolute stereochemistry.

RN 191013-60-2 CAPLUS
CN lH-Indole-3-propanamide, N-[[(2S)-2,3-dihydro-7-[(methylsulfonyl)amino]1,4-benzodioxin-2-yl]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 191013-61-3 CAPLUS
CN HH-Indole-3-butanamide, N-[(2,3-dihydro-1,4-benzodioxin-2-y1)methyl]-5fluoro-1-methyl)- (CA INDEX NAME)

L8 ANSWER 20 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 191013-56-6 CAPLUS
CN 1H-Indole-3-propanamide, N-{(2,3-dihydro-1,4-benzodioxin-2-y1)methyl]-(CA INDEX NAME)

RN 191013-57-7 CAPLUS
CN HH-Indole-3-butanamide, N-[(2,3-dihydro-1,4-benzodioxin-2-y1)methyl]-5-fluoro- (CA INDEX NAME)

RN 191013-58-8 CAPLUS
CN 1H-Indole-3-butanamide, N-[(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-y1)methyl]-5-fluoro- (CA INDEX NAME)

L8 ANSWER 20 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 191013-62-4 CAPLUS
CN 1H-Indole-3-butanamide, N-[(2,3-dihydro-1,4-benzodioxin-2-y1)methy1]-5-methoxy- (CA INDEX NAME)

RN 191013-63-5 CAPLUS
CN H-Indole-3-propanamide, N-[[2,3-dihydro-7-[(methylsulfonyl)amino]-1,4-benzodioxin-2-yl|methyl]-1-methyl- (CA INDEX NAME)

ANSWER 21 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1995:1003035 CAPLUS 124:175827 DOCUMENT NUMBER: TITLE: Antidepressant 3-(aminocycloalkenyl)indole-5-nitrile derivatives derivatives Cipolina, Joseph A.; Mattson, Ronald J.; Sloan, Charles P. Bristol-Myers Squibb Company, USA U.S., 7 pp. CODEN: USXXAM INVENTOR (S): PATENT ASSIGNEE(S): DOCUMENT TYPE: Patent English FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

DATE PATENT NO. KIND DATE APPLICATION NO. US 5468767 US 5607961 PRIORITY APPLN. INFO.: 19951121 19970304 US 1994-178073 19940106 US 1994-178073

OTHER SOURCE(S):

CASREACT 124:175827; MARPAT 124:175827

Title compds. I [R1 = H or C1-4 alkyl; R2 = C1-4 alkyl or (CH2)pAr; Ar = $\{un\}$ substituted Ph, pyridinyl, pyrimidinyl or 1,4-benzodioxan-2-yl; m = 0 or 1; n = 1-3; p = 0-4; dotted line = optional double bondl are claimed, and several examples were prepared and tested for use as antidepressants. For example, condensation of lH-indole-5-acetonitrile with 4-[(2-phenylethyl)amino]cyclohexanone [preparation given] in EtOH in the presence of pyrrolidine gave 35% title compound II. Of 18 selected I

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ANSWER 21 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN

ANSWER 21 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) with m=0, all with n=2 and double bond in ringl, all 18 compds. had IC50 for in vitro inhibition of 5-HT uptake activity of < 100 nM, and 14 compds. had IC50 of < 10 nM. 173906-58-6P 173906-87-1P RL: BRC (Biological activity or effector, except adverse); BSU logical ogical
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of antidepressant (aminocycloalkenyl)indolenitrile /8.) 173906-58-6 CAPLUS 1H-Indole-5-carbonitrile, 3-[4-[(2,3-dihydro-1,4-benzodioxin-2-yl)methylamino]-1-cyclohexen-1-yl]- (CA INDEX NAME)

173906-87-1 CAPLUS
1H-Indole-5-carbonitrile, 3-{4-{(2,3-dihydro-1,4-benzodioxin-2yllmethylmino|-1-cyclohexen-1-yl]-, ethanedioate (1:1) (CA INDEX NAME)

173906-58-6 C24 H23 N3 O2

2 CM

CRN 144-62-7 CMF C2 H2 O4

L8 ANSWER 22 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1993:204695 CAPLUS
DOCUMENT NUMBER: 118:204695
TITLE: 3-D QSAR for intrinsic activity of 5-HTIA receptor ligands by the method of comparative molecular field

Agarwal, Atul: Taylor, Ethan Will Comput. Cent. Mol. Struct. Des., Univ. Georgia, Athens, GA, 30602-2352, USA Journal of Computational Chemistry (1993), 14(2), 237-45

CODEN: JCCHDD; ISSN: 0192-8651

DOCUMENT TYPE:

UAGE: English
The affinity of a ligand for a receptor is usually expressed in terms of
the dissociation constant (Ki) if the drug-receptor complex, conveniently
measured by the inhibition of radioligand binding. However, a ligand can
be an antagonist, a partial agonist, or a full agonist, a property largely

ry independent of its receptor affinity. This property can be quantitated a.5

intrinsic activity (IA), which can range from 0 for a full antagonist to

intrinsic activity (IA), which can range from 0 for a full antagonist to for a full agonist. Although QSAR methods have been applied for the prediction of receptor affinity with considerable success, the prediction of IA, even qual., has rarely been attempted. Because most traditional QSAR methods are limited to congeneric series, and there are often major structural differences between agonists and antagonists, this lack of success in predicting IA is understandable. To overcome this limitation, the authors used the method of comparative mol. field anal. (COMFA), which, unlike traditional Hansch anal., permits the inclusion of structurally diswiniar compds. in a single QSAR model. A structurally diverse set of 5-hydroxytryptamine IA (5-HTIA) receptor ligands, with literature IA data (determined by the inhibition of 5-HT sensitive forskolin-stimulated adenylate cyclase), was used to develop a 3-D QSAR model correlating intrinsic activity with mol. structure properties of SHTIA receptor ligands. This COMFA model had a cross validated r2 of 0.481, five components and final conventional f2 of 0.943. The receptor model suggests that agonist and antagonist ligands can share parts of a common binding site on the receptor, with a primary agonist binding on

on that is also occupied by antagonists and partial agonists. The COMFA steric field graph clearly shows that agonists tend to be "flatter" (mccoplanar) than antagonists, consistent with the difference between the 5-HTIA agonist and antagonist pharmacophores proposed by Hibert and coworkers. The COMFA electrostatic field graph suggests that, in the region surrounding the essential protonated aliphatic amino group, the

mol. electrostatic potential may be weaker in antagonists as compared to agonists. Together, the steric and electrostatic maps suggest that in

secondary binding site region increased hydrophobic binding may enhance antagonist activity. These can successfully distinguish between agonist and antagonist 5-HTIA ligands. This is the first time this or any other QSAR method has been successfully applied to the correlation of structure with IA rather than potency or affinity. The anal, has suggested various structural features associated with agonist and antagonist behaviors of 5-HTIA ligands and thus should assist in the future design of drugs that act via 5-HTIA receptors.

ANSWER 22 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RL: BIOL (Biological study)
 (intrinsic activity of, as serotonin SIA receptor ligand, QSAR for, mol. field anal. of)
116729-30-7 CAPLUS
HR-Indole-3-ecthanamine, N-[(2,3-dihydro-1,4-ben2odioxin-2-yl)methyl]-5-methoxy- (CA INDEX NAME)

L8 ANSWER 23 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1990:151250 CAPLUS DOCUMENT NUMBER: 112:151250 TITLE: MDL 73005EF: partial agonist a

AUTHOR (S):

III:151250

MDL 73005EF: partial agonist at the 5-HTIA receptor negatively linked to adenylate cyclase Cornfield, Linda J.; Nelson, David L.; Taylor, E. W.; Martin, A. R.

Coll. Pharm., Univ. Arizona, Tucson, AZ, 85721, USA European Journal of Pharmacology (1989), 173(2-3), 189-92

CODEN: R.JPHAZ: VERN. ACC. CORPORATE SOURCE: SOURCE:

CODEN: EJPHAZ; ISSN: 0014-2999

DOCUMENT TYPE: LANGUAGE:

MDL 73005EF (I) has been recently described as a potent, highly selective 5-HT1A ligand. Although proposed to act predominantly as an antagonist, it was demonstrated that I also acts as a highly efficacious partial agonist at the 5-HT1A receptor, based on its ability to inhibit forskolin-stimulated adenylate cyclase in rat hippocampal membranes. Compared with two structurally related 5-HT1A partial agonists, the rank order of potency of I in the forskolin-stimulated adenylate cyclase assay was comparable to affinity calculated by radioligand binding.

116729-30-7 ΑВ IT

116729-30-7
RI: BIOL (Biological study)
(serotoninergic SIA receptor partial agonist, in brain hippocampus, adenylate cyclase in)
116729-30-7 CAPLUS
HH-Indole-3-ethanamine, N-[{2,3-dihydro-1,4-benzodioxin-2-yl}methyl]-5-methoxy- (CA INDEX NAME)

L8 ANSWER 24 OF 26 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 1988:542399 CAPLUS DOCUMENT NUMBER: 109:142399

DOCUMENT NUMBER: TITLE: Use of forskolin stimulated adenylate cyclase in rat hippocampus as a screen for compounds that act

through

AUTHOR (S):

Confield, L. J.; Nelson, D. L.; Monroe, P. J.;
Taylor, E. W.; Nikam, S. S.
Coll. Pharm., Univ. Arizone, Tucson, AZ, 85721, USA
Proceedings of the Western Pharmacology Society
(1988), 31, 265-7
CODEN: PMSPAS; ISSN: 0083-8969
Journal
English CORPORATE SOURCE: SOURCE:

LANGUAGE: English
AB 5-HT, buspirone and 8-hydroxy-2-(di-n-propylamino)tetralin (8-OH-DPAT)
inhibited forskolin stimulated cAMP production in rat hippocampus with

inhibited forskolin stimulated cAMP production in rat hippocampus with varying degrees of efficacy. The EC50 values for these compds. In the cyclase assay system were uniformly less than the IC50 values against [3H]8-OH-DPAT binding, although a reasonably good correlation was found between the EC50 and IC50 values for these compds.

N-(2-(5-Methoxyindole3-yl]ethyl]-2 aminomethyl-1, 4-benzodioxan, 5-carboxamido-3(2-(4-phenyl-1,2,3,6-tetrahydropyrid-1-yl)ethyl)indole and 5-methoxy-3(2-(4-phenyl-1,2,3,6-tetrahydropyrid-1-yl)ethylindole, and spiroxatrine exhibited potential 5-HT1A agonistic activity, as shown by varying degrees of inhibition of forskolin-stimulated adenylate cyclase. However, there was no correlation between the potencies of the cyclase data and the [3H]-8-OH-DPAT binding data for these 4 compds. Spiroxatrine produced a complex inhibition curve with a maximal inhibition that was greater than that observed with 5-HT itself. Nonlinear regression anal. of this curve revealed high and low potency components. The ratio of the EC50 for the high-potency component to the IC50 value at 3-HT1A binding sites was consistent with that for the other 5-HT1A agonists, 5-HT, 8-OH-DPAT and biaspirone.

IT

bispirone.
116729-30-7
RI: BIOL (Biological study)
(forskolln-stimulated adenylate cyclase of brain response to)
116729-30-7 CAPLUS

1H-Indole-3-ethanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-5-methoxy- (CA INDEX NAME)

L8 ANSWER 25 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1981:121503 CAPLUS DOCUMENT NUMBER: 94:121503

TITLE:

INVENTOR (S):

94:121303
Aminopropanol derivatives and pharmaceutical
compositions containing them
Friebe, Walter Gunar: Michel, Helmut; Ross, Carl
Heinz: Wiedemann, Fritz; Bartsch, Wolfgang; Dietmann,

Mail Bookringer Mannheim G.m.b.H., Fed. Rep. Ger. Ger. Offen., 57 pp. CODEN: GWXXBX Patent PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE:

German 1

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
	DE 2905877	A1	19800828	DE 1979-2905877		19790216
	US 4346093	A A1	19820824			19800131
	CA 1134827	A1	19821102	CA 1980-345099		19800205
	IL 59352	А	19850131			19800210
	FI 8000408	А	19800817	FI 1980-408		19800211
	FI 66371	В	19840629			
	FI 66371	С	19841010			
	AU 8055410	А	19800821	AU 1980-55410		19800211
	AU 531282	B2	19830818			
	SU 1243622	A3	19860707			19800211
	EP 14951	A2	19800903	EP 1980-100719		19800213
	EP 14951		19810204			
	EP 14951	B1	19830112			
	R: AT, BE, CI					
	DD 148774	A5	19810610	DD 1980-219037		
	AT 2190	T	19810610 19830115 19800817 19800916	AT 1980-100719 DK 1980-653		19800213
	DK 8000653	A	19800817	DK 1980-653		19800215
	ES 488657	A1	19800916	ES 1980-488657		19800215
	JP 55120559		19800917	JP 1980-16711		19800215
	JP 63048864		19880930			
			19810930			19800215
	HU 28416	A2	19831228	HU 1980-350		19800215
	HU 184719	В	19841029			
	CS 227305	B2	19840416	CS 1980-1055		19800215
	CS 227312	B2	19840416			19800930
	CS 227313		19840416			19800930
	CS 227327	B2	19840416	CS 1981-4336		19810610
PR	IORITY APPLN. INFO.:			DE 1979-2905877	A	19790216
				EP 1980-100719	А	19800213
				CS 1980-1055	n 2	19800215

OTHER SOURCE(S): MARPAT 94:121503 L8 ANSWER 25 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

The title compds. {I: R = (substituted) aryl, pyridyl: Rl = H, alkyl, alkanoyl, aralkyl: R2, R3 = H, alkyl, (esterified) hydroxyalkyl, alkoxycarbonyl: R4 = H, acyl, aroyl: R5 = H, alkyl, aralkyl: R6 = H, alkyl: R7 = H, OH, alkyl: Z = bond, CH2, O, S; X = XHX2, X3:X | X1 = (substituted) NH, CH2: X2 = CH2, CO, CS; X3, X4 = N, (substituted) CH] were prepared for use as a coronary vasodilators and antihypertensives (no data). Thus, refluxing 2,3-dinitro-4-(glycidyloxy)toluene with PhcH2NHCH2CHMOCGM40Me-2 in EtcH, followed by hydrogenation over Pd-C and cyclizing the resulting diamine with COCl2 gave II.HCl. 76650-89-00 76651-14-4P RL: SPN (Synthetic preparation); PREP (Preparation) (preparation off) 76650-89-0 CAPLUS Benzoic acid, 4-chloro-, compd. with 1-[{(2,3-dihydro-1,4-benzodioxin-2-yl]methyl]amino]--1(6-methyl-lH-indol-4-yl)oxy]-2-propanol (1:1) (9CI) (CR INDEX NAME) AB ΙT

CM 1

CRN 76650-88-9 CMF C21 H24 N2 O4

ANSWER 25 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) ANSWER 25 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

2 CM

74-11-3 C7 H5 C1 O2

76651-14-4 CAPLUS
1H-Indole-2-carboxylic acid, 4-[3-[[(2,3-dihydro-1,4-benzodioxin-2yl)methyl]amino[-2-hydroxypropoxy]-6-methyl-, ethyl ester (9CI) (C INDEX NAME)

L8 ANSWER 26 OF 26 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 1964:52778 CAPLUS COCUMENT NUMBER: 60:52778 CRIGINAL REFERENCE NO.: 60:9287d-f 1,4-Benzodioxan-2-carboxamides Bid, John H.; Judd, Claude I. Lakeside Laboratories, Inc. 2 pp. Patent INVENTOR(S): PATENT ASSIGNEE(S): DOCUMENT TYPE:

Unavailable FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. DATE APPLICATION NO. KIND DATE US 3117978 PRIORITY APPLN. INFO.: 19640114 US 1961-84753 19610125 US 19610125

GI For diagram(s), see printed CA Issue.

AB The title compds., possessing antidepressant and central nervous system stimulating properties, are prepared by treating

1,4-benzodioxan-2-carbonyl chloride (I) with an aralkylamine in an inert solvent in the presence of an acid acceptor. Thus, 7.5 g. trans-2-phenylcyclopropylamine, 10.1 g. KZCO3, and 50 ml. anhydrous C6H6 is treated dropwise with 11.2 g. I, the mixture stirred several hrs. at room temperature, 100 ml. H2O added, the C6H6 C6H6

layer separated, and the solvent evaporated to give 16.0 g. of an oil which

layer separated, and the solvent evaporated to give 16.0 g. of an oil the crystallized when covered with n-hexane and Et2O to yield 7.5 g.
N-(trans-2-phenyleyclopropyl)-1,4-benzodioxan-2-carboxamide (Ia), m.
96-112*. Recrystn. from Et2O gave 3.1 g. pure product, m.
129-31*. Also prepared are N-(2-phenyl-1-propyl)-1,4-benzodioxan-2-carboxamide, m. 82-90* (mixture of isomers), and NI1-(3-indoyl)-2-butyl)-1,4-benzodioxan-2-carboxamide (II), m. 99-102*. A single pure isomer of II was also isolated, m. 135-8* 99-102*. A single pure isomer of II was also isolated, m. 135-8* 99-102*. Page 19462-17-6P, 1,4-Benzodioxan-2-carboxamide, N-[1-(indol-3-ylmethyl)propyl]RL: PREP (Preparation)
(preparation of)
94862-17-6 CAPUS
1,4-Benzodioxan-2-carboxamide, N-[1-(indol-3-ylmethyl)propyl)- (7CI) (CA INDEX NAME)

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PASSWORD:

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ENTRY SESSION FULL ESTIMATED COST 24.30 27.07

Uploading C:\Program Files\Stnexp\Queries\10-556,931e.str



TOTAL

chain nodes : 11 12 27

ring nodes :

1 2 3 4 5 6 7 8 9 10 15 16 17 18 19 20 21 22 23

chain bonds :

8-11 11-12 12-27 23-27

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 15-16 15-20 15-21 16-17

16-23 17-18 18-19 19-20 21-22 22-23

exact/norm bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 8-11 9-10 11-12 12-27 15-16 15-20 15-21 16-17 16-23 17-18 18-19 19-20 21-22 22-23 23-27 isolated ring systems : containing 1 : 15 :

G1:C,N

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:CLASS 12:CLASS 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 27:CLASS

L3 STRUCTURE UPLOADED

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*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

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SAMPLE SEARCH INITIATED 19:15:34 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 156 TO ITERATE

100.0% PROCESSED 156 ITERATIONS 6 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE** BATCH **COMPLETE**

PROJECTED ITERATIONS: 2371 TO 3869 PROJECTED ANSWERS: 266

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6 SEA SSS SAM L3

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FULL SEARCH INITIATED 19:15:54 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 3492 TO ITERATE

100.0% PROCESSED 3492 ITERATIONS 95 ANSWERS

SEARCH TIME: 00.00.01

L5 95 SEA SSS FUL L3

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L6 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2004:1059361 CAPLUS DOCUMENT NUMBER: 142:38264 TITLE: Preparation of the state o

Preparation of indole derivatives with an improved

antipsychotic activity
Bartolome-Nebreda, Jose Manuel; Andres-Gil, Jose INVENTOR (5):

Ignacio PATENT ASSIGNEE(S): SOURCE: Janssen Pharmaceutica N.V., Belg.

PCT Int. Appl., 43 pp. CODEN: PIXXD2 Patent

DOCUMENT TYPE: LANGUAGE: English 2

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

APPLICATION NO. PATENT NO. KIND DATE DATE 20040526 20051116 20030530

JP 2006528957 US 2007066608 PRIORITY APPLN. INFO.: JP 2006-530219 US 2005-556931 WO 2003-EP5789

A 20030530 WO 2004-EP50922 W 20040526

OTHER SOURCE(S): MARPAT 142:38264

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

ANSWER 1 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN CM 1 (Continued)

805230-20-0 C19 H20 F N3 O2

СМ 2

144-62-7 C2 H2 O4

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REFERENCE COUNT: THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ANSWER 1 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
The present invention relates to a novel indole derivs. I [al:a2a3:a4 = N:CHCR:CH, CH:CHCH:CH, CH:CHCH:N; Z122 = OCH2O, O(CH2)2O, S(CH2)2O, etc.; X = CR6, N; R1-R4, R6 = H, halo, CN, etc.; p = 0-3; R5 = H, alkyl, etc.; with the proviso] and their pharmaceutically acceptable acid or base addition salts that exhibit a binding affinity towards dopamine receptors, in particular towards dopamine D2, D3 and D4 receptors, with selective serotonin reuptake inhibition properties and acting as 5-HTLA agonists or partial agonists. E.g., a multi-step synthesis of IV, starting from 2-chloro-3-pyridinamine, which showed pic30 of 6.7 and 7.1 against D2 and D3 receptor binding, resp., was given. The invention also relates to pharmaceutical compns. comprising the compds. I, the use thereof for the prevention and/or treatment of a range of psychiatric and neurol. disorders, in particular certain psychotic disorders, most in particular schizophrenia and processes for their production 805232-67-IP 805232-71-79
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of indole derivs. with an improved antipsychotic

vity)
805232-67-1 CAPLUS
1,4-Dioxino[2,3-c]pyridine-3-methanamine, N-{3-(5-fluoro-1H-indol-3-yl)propyl]-2,3-dihydro-, ethanedioate (9CI) (CA INDEX NAME)

805230-16-4 C19 H20 F N3 O2

0|| но-

805232-71-7 CAPLUS
1,4-Dioxino[2,3-b]pyridine-3-methanamine, N-[3-(5-fluoro-1H-indol-3-yl)propyl]-2,3-dihydro-, ethanedioate (9CI) (CA INDEX NAME)

ANSWER 2 OF 8 CAPLUS COPYRIGHT 2007 ACS ON STN SSION NUMBER: 2004:1059319 CAPLUS MENT NUMBER: 142:38263

ACCESSION NUMBER: DOCUMENT NUMBER:

TITLE:

142:38263
Preparation of indole derivatives with an improved antipsychotic activity
Bartolome-Nebreda, Jose Manuel; Andres-Gil, Jose INVENTOR(S):

PATENT ASSIGNEE(S):

Bartolome-Nebreda, José Manuel; A Ignacio Janssen Pharmaceutica N.V., Belg. PCT Int. Appl., 40 pp. CODEN: PIXXD2 Patent

DOCUMENT TYPE:

English

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	PAT	ENT :	NO.			KIN	D	DATE			API	PLI	CAT	ION	NO.		D	ATE	
	WO	2004 W:	1062 US			A1		2004	1209		WO	20	003-	EP57	89		2	0030	530
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											WO	20	003-	EP57	89		A 2	0030	530
											wo	20	004-	EP50	922		W 2	0040	526
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GI			,.							-									

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT

The present invention relates to a novel indole derivs. I [al:a2a3:a4 = N:CHCH:CH, CH:NCH:CH, CH:CHN:CH, CH:CHCH:N, 2122 = OCH20, O(CH2)20, S(CH2)20, etc.; X = CR6, N; R1-R4, R6 = H, halo, CN, etc.; p = 0-3; R5 = 0.00

ANSWER 2 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) H, alkyl; Y = NR8(CH2)n, II, III, etc.; m = 0-1; n = 0-6; R8 = H, halo, alkyl, etc.; with the proviso] and their pharmaceutically acceptable acid or base addn. salts that exhibit a binding affinity towards dopamine receptors, in particular towards dopamine D2, D3 and D4 receptors, with selective serotonin reuptake inhibition properties and acting as 5-HTIA agonists or partial agonists. E.g., a multi-step synthesis of IV, starting from 2-chloro-3-pyridinamine, which showed pIC50 of 6.7 and 7.1 against D2 and D3 receptor binding, resp., was given. The invention also relates to pharmaceutical compns. comprising the compds. I, the use thereof for the prevention and/or treatment of a range of psychiatric and neurol. disorders, in particular certain psychotic disorders, most in particular schizophenia and processes for their prodn. 805230-16-4P 805230-20-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(preparation of indole derivs, with an improved antipsychotic

activity)
RN 805230-16-4 CAPLUS
CN 1,4-Dioxino[2,3-e]pyridine-3-methanamine, N-[3-(5-fluoro-1H-indol-3-y1)propyl]-2,3-dihydro- (CA INDEX NAME)

805230-20-0 CAPLUS 1,4-Dioxino[2,3-b]pyridine-3-methanamine, N-[3-(5-fluoro-1H-indol-3-y1)propyl]-2,3-dihydro- (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) treatment of the resulting amide with LiAlH4 in THF afforded the title compd. II which showed IC50 of 3.50 nM against D2 receptor binding and IC50 of 3.77 nM against 5-WT1A receptor binding.
191012-95-0P 191012-96-1P 191012-97-2P
191013-08-3P 191013-09-3P 191013-01-1P
191013-02-2P 191013-03-3P 191013-01-7P
191013-05-5P 191013-03-3P 191013-07-7P
191013-05-5P 191013-19-5P 191013-10-2P
191013-11-3P 191013-13-5P 191013-10-2P
191013-17-7P 191013-18-0P 191013-19-1P
191013-20-4P 191013-21-5P 191013-25-5P
191013-27-7P 191013-24-8P 191013-25-5P
191013-28-3P 191013-30-6P 191013-25-5P
191013-32-8P 191013-30-6P 191013-31-7P
191013-32-8P 191013-36-2P 191013-31-7P
191013-38-4P 191013-36-2P 191013-37-5P
191013-38-4P 191013-36-2P 191013-37-5P
191013-38-4P 191013-34-0P 191013-71-5P
RL: BRC (Biological activity or effector, except adverse); BSU

RL: BAC (Biological activity or effector, except adverse); BSU

(Biological

CH2-NH-(CH2)4

191012-96-1 CAPLUS
1H-Indole-3-propanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-5(phenylmethoxy)- (CA INDEX NAME)

0-- CH2-- Ph CH2-NH- (CH2) 3-

191012-97-2 CAPLUS
1H-Indo1-5-ol, 3-{3-{[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]amino]propyl}- (CA INDEX NAME)

NH- (CH2) 3

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L6 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1998:300618 CAPLUS DOCUMENT NUMBER: 129:4651

Preparation of indolealkyl derivatives of benzodioxanmethylamine as antidepressants and

INVENTOR (S)

antipsychotic agents
Kang, Young H.; Stack, Gary P.
American Home Products Corporation, USA PATENT ASSIGNEE(S): SOURCE:

U.S., 14 pp. CODEN: USXXAM DOCUMENT TYPE: Patent English

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE US 5750724 PRIORITY APPLN. INFO.: 19980512 US 1996-739912 US 1996-739912 19961030

OTHER SOURCE(S): MARPAT 129-4651

The title compds. [1: R1, R4, R5 = H, alkyl, alkoxy, etc.; R1 is defined as above and R4R5 are ortho substituted methylenedioxy, ethylenedioxy, or propylenedioxy; R2, R3 = H, alkyl: n = 3-4] and their pharmaceutically acceptable salts, useful in the treatment of depression and related disorders, were prepared Thus, reaction of 3-indolepropionic acid with 2,3-dihydro-1,4-benzodioxin-2-methanamine.HCl in the presence of l-hydroxybenzotriazole and 1,3-diisopropylcarbodiimide in DMF followed by

ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

191012-98-3 CAPLUS
1H-Indol-5-ol, 3-[3-[[(2,3-dihydro-7-methoxy-1,4-benzodioxin-2\text{\tind{\text{\tinc{\text{\tin}\text{\texi{\text{\texi\texi{\text{\tex{\texi{\text{\texi{\text{\text{\text{\text{\texi{\texi{\texi{\tex

191012-99-4 CAPLUS
1H-Indole-3-propanamine, N-[(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-y1)methyl]-5-methoxy-N-methyl- (CA INDEX NAME)

191013-01-1 CAPLUS

1H-Indole-3-butanamine, N-[(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl)methyl)-5-methoxy- (CA INDEX NAME)

CH2-NH- (CH2) 4

191013-02-2 CAPLUS 1,4-Benzodioxin-6-ol, 2,3-dihydro-3-[[[4-(5-methoxy-1H-indol-3-yl)butyl]amino|methyl]- (CA INDEX NAME)

CH2-NH- (CH2)4-

191013-03-3 CAPLUS

Methanesulfonamide, N-[2,3-dihydro-3-[[[4-(1H-indol-3-y1)butyl]amino]methyl]-1,4-benzodioxin-6-yl]- (CA INDEX NAME)

L6 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 191013-04-4 CAPLUS
CN 1H-Indole-3-propanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-y1)methy1]-5-methoxy- (CA INDEX NAME)

RN 191013-05-5 CAPLUS
CN 1H-Indole-3-propanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-y1)methy1]-5fluoro- (CA INDEX NAME)

RN 191013-06-6 CAPLUS N-[2,3-dihydro-3-[[[4-(5-methoxy-lH-indol-3-yl)butyl)aminolmethyl]-1,4-benzodioxin-6-yl]- (CA INDEX NAME)

RN 191013-07-7 CAPLUS
CN 1,4-Benzodioxin-6-ol, 2,3-dihydro-3-[[[3-(1H-indol-3-y1)propyl]amino]methyl]- (CA INDEX NAME)

L6 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 191013-13-5 CAPLUS
CN 1H-Indole-3-butanamine, N-{(2,3-dihydro-1,4-benzodioxin-2-y1)methyl}-5fluoro-1-methyl- (CA INDEX NAME)

RN 191013-14-6 CAPLUS
CN 1H-Indole-3-butanamine, N-{(2,3-dihydro-1,4-benzodioxin-2-y1)methy1]-5methoxy- (CA INDEX NAME)

RN 191013-15-7 CAPLUS
CN Methanesulfonamide, N-[2,3-dihydro-3-[[[3-{1-methyl-1H-indol-3-y1}propyl]amino]methyl]-1,4-benzodioxin-6-yl]- (CA INDEX NAME)

RN 191013-18-0 CAPLUS
CN IH-Indole-3-butanamine, N-[[(2S)-2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

L6 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 191013-08-8 CAPLUS
CN 1H-Indole-3-butanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-

A INDEX NAME)

RN 191013-09-9 CAPLUS
CN 1H-Indole-3-propenamine, N-{(2,3-dihydro-1,4-benzodioxin-2-y1)methyl}-(CA INDEX NAME)

RN 191013-10-2 CAPLUS
CN 1H-Indole-3-butanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-y1)methyl]-5fluoro- (CA INDEX NAME)

RN 191013-11-3 CAPLUS
CN 1H-Indole-3-butanamine, N-[{2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl}methyl}-5-fluoro- (CA INDEX NAME)

L6 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 191013-19-1 CRPLUS
CN 1H-Indole-3-butanamine, N-[[(2S)-2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yllmethyl]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HC1

RN 191013-20-4 CAPLUS
CN 1,4-Benzodioxin-6-o1, 2,3-dihydro-3-[[[4-(1H-indol-3yl)butyl]amino|methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

• HC1

RN 191013-21-5 CAPLUS
CN 1H-Indole-3-propenamine, N-{(2,3-dihydro-1,4-benzodioxin-2-y1)methyl}-5(phenylmethoxyl)-, monohydrochloride (9CI) (CA INDEX NAME)

ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) 191013-22-6 CAPLUS 1-11-11-01-5-01, 3-13-[[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]amino|propyl]-, (2E)-2-butenedioate (2:1) (salt) (9CI) (CA INDEX NAME) CM 1 CRN 191012-97-2 CMF C20 H22 N2 O3 CH2-NH- (CH2) 3 CM 2 CRN 110-17-8 CMF C4 H4 O4 Double bond geometry as shown. HO2C E CO2H 191013-23-7 CAPLUS 1H-Indol-5-01, 3-[3-[{(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl)methyl]amino]propyl}-, (2E)-2-butenedioate (2:1) {salt} (9CI) (CA INDEX NAME) CM 1 CRN 191012-98-3 CMF C21 H24 N2 O4 CH2-NH- (CH2) 3 2 Double bond geometry as shown. ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) CH2-NH- (CH2) 3 CM 2 CRN 110-17-8 CMF C4 H4 O4 Double bond geometry as shown. HO2C E CO2H 191013-26-0 CAPLUS
1H-Indole-3-butanamine, N-[{2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yllmethyl]-5-methoxy-, (22)-2-butenedioate {1:1} (CA INDEX NAME) CRN 191013-01-1 CMF C23 H28 N2 O4 CH2-NH- (CH2) 4 CM 2 Double bond geometry as shown. RN 191013-27-1 CAPLUS
CN 1,4-Benzodioxin-6-ol, 2,3-dihydro-3-[[[4-(5-methoxy-1H-indol-3-yl)butyl]amino]methyl]-, (ZE)-2-butenedioate (2:1) (salt) (9CI) (CA INDEX CM 1

L6 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) RN 191013-24-8 CAPLUS
CN 1H-Indole-3-propanamine, N-[(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl)methyl]-5-methoxy-N-methyl-, (2E)-2-butenedioate (2:1) (CA INDEX NAME) CM 1 CRN 191012-99-4 CMF C23 H28 N2 O4 CH2- N- Me (CH2)3 CM 2 CRN 110-17-8 CMF C4 H4 Q4 Double bond geometry as shown. 191013-25-9 CAPLUS
1H-Indol-5-01, 3-[3-[{(2,3-dihydro-7-hydroxy-1,4-benzodioxin-2-y]hmethyl]amino]propyl}-, (2E)-2-butenedioate (2:1) {solt} (9CI) (CA INDEX NAME) ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN CRN 191013-02-2 CMF C22 H26 N2 O4 (Continued) CM 2 CRN 110-17-8 CMF C4 H4 O4 Double bond geometry as shown. HO2C E CO2H 191013-28-2 CAPLUS Methanesulfonamide, N-[2,3-dihydro-3-[[[4-{1H-indol-3-y1}buty1]amino]methyl]-1,4-benzodioxin-6-y1]-, (2E)-2-butenedioate {2:1} (CA INDEX NAME) CM 1 CRN 191013-03-3 CMF C22 H27 N3 O4 S CM 2 Double bond geometry as shown. но2С СО2Н 191013-29-3 CAPLUS 1H-Indole-3-propanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl}-5-methoxy-, (2E)-2-butenedioate (2:1) (CA INDEX NAME)

10-556,931.trn L6 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) CH2-NH- (CH2) 3 CM 2 CRN 110-17-8 CMF C4 H4 O4 Double bond geometry as shown. HO2C E CO2H 191013-30-6 CAPLUS
1H-Indole-3-propanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl}-5-fluoro-, (2E)-2-butenedioate (2:1) (CA INDEX NAME) CM 1 CRN 191013-05-5 CMF C20 H21 F N2 O2 CH2-NH-(CH2)3 CM 2 Double bond geometry as shown. но2с Е со2н 191013-31-7 CAPLUS L6 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN Double bond geometry as shown. (Continued) HO2C E CO2H 191013-33-9 CAPLUS
1H-Indole-3-butanamine, N-{{2,3-dihydro-1,4-benzodioxin-2-yl}methyl}-, {2E}-2-butenedioate {2:1} (CA INDEX NAME) CM 1 CRN 191013-08-8 CMF C21 H24 N2 O2 CM 2 CRN 110-17-8 CMF C4 H4 O4 Double bond geometry as shown. HO2C E CO2H 191013-34-0 CAPLUS
1H-Indole-3-propanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-, (ZE)-2-butenedioate (2:1) (CA INDEX NAME) CM 1 CRN 191013-09-9 CMF C20 H22 N2 O2

ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
Methanesulfonamide, N-[2,3-dihydro-3-[[[4-(5-methoxy-1H-indol-3-yl)butyl]amino]methyl]-1,4-benzodioxin-6-yl]-, (2E)-2-butenedioate (2:1)
(CA INDEX NAME) CM 1 CRN 191013-06-6 CMF C23 H29 N3 O5 S - NH- (CH2) 4 CM 2 CRN 110-17-8 CMF C4 H4 O4 Double bond geometry as shown. 191013-32-8 CAPLUS
1,4-Benzodioxin-6-ol, 2,3-dihydro-3-{{{3-{1H-indol-3-yl}propyl}amino|methyl}-, (2E)-2-butenedioate {2:1} {salt} (9CI) (CA INDEX NAME) CRN 191013-07-7 CMF C20 H22 N2 O3 CH2-NH- (CH2) 3 CM 2 L6 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) но₂с Е со₂н 191013-35-1 CAPLUS HR-Indole-3-butanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-5-fluoro-, (2E)-2-butenedioate (2:1) (CA INDEX NAME) CM 1 CRN 191013-10-2 CMF C21 H23 F N2 O2 CH2-NH- (CH2) 4 CM 2 CRN 110-17-8 CMF C4 H4 O4 Double bond geometry as shown. HO2C E CO2H 191013-36-2 CAPLUS
1H-Indole-3-butanamine, N-[(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl)methyl]-5-fluoro-, (2E)-2-butenedioate (2:1) (CA INDEX NAME) CM 1 CRN 191013-11-3 CMF C22 H25 F N2 O3

Double bond geometry as shown.

Page 148

Double bond geometry as shown.

10-556,931.trn ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) © CO2H 191013-37-3 CAPLUS
1,4-Benzodioxin-6-01, 2,3-dihydro-3-[[[3-(1H-indol-3-y1)propyl]amino]methyl]-, (3S)- (CA INDEX NAME) Absolute stereochemistry. /(CH2)3 191013-38-4 CAPLUS
1,4-Benzodioxin-6-el, 2,3-dihydro-3-[[[3-{IH-indol-3-yl)propyl]amino]methyl]-, (3S)-, (2E)-2-butenedioate {2:1} (salt) (9CI) (CA INDEX NAME) CM 1 CRN 191013-37-3 CMF C20 H22 N2 O3 Absolute stereochemistry. (CH2)3 CM 2 CRN 110-17-8 CMF C4 H4 O4 Double bond geometry as shown. E co₂H HO2C 191013-39-5 CAPLUS
Methanesulfonamide, N-[(3S)-2,3-dihydro-3-[[[3-(1H-indol-3-yl)propyl]amino]methyl]-1,4-benzodioxin-6-yl]- (CA INDEX NAME) Absolute stereochemistry. ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) CH2-NH- (CH2) 4 CM 2 Double bond geometry as shown. но2С СО2Н 191013-42-0 CAPLUS
Mcthanesulfonamide, N-{2,3-dihydro-3-{{{3-(1-methyl-1H-indol-3-yl)propyl} amino}methyl}-1,4-benzodioxin-6-yl}-, (2E)-2-butenedioate (2:1)
(CA INDEX NAME) CM 1 CRN 191013-15-7 CMF C22 H27 N3 O4 S сн₂-- мн- (сн₂) з CM 2 CRN 110-17-8 CMF C4 H4 O4 Double bond geometry as shown. но₂с СО2Н

191013-71-5 CAPLUS
1H-Indole-3-butanamine, N-{(2,3-dihydro-1,4-benzodioxin-2-y1)methyl}-5-methoxy-, (2E)-2-butenedioate (2:1) (CA INDEX NAME)

ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) 191013-40-8 CAPLUS Methanesulfonamide, N-{(3S}-2,3-dihydro-3-{[[3-{1H-indol-3-y|)propyl]amino]methyl}-1,4-benzodioxin-6-yl}-, (2E)-2-butenedioate (2:1) (CA INDEX NAME) CM 1 CRN 191013-39-5 CMF C21 H25 N3 O4 S Absolute stereochemistry. (CH2)3 CM 2 CRN 110-17-8 CMF C4 H4 O4 Double bond geometry as shown. HO2C E CO2H 191013-41-9 CAPLUS
1H-Indole-3-butanamine, N-{(2,3-dihydro-1,4-benzodioxin-2-y1)methyl}-5-fluoro-1-methyl-, (2E)-2-butenedioate (2:1) (CA INDEX NAME) CRN 191013-13-5 CMF C22 H25 F N2 O2 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) CM 1 191013-14-6 C22 H26 N2 O3 CH2-NH- (CH2) 4 CM 2 CRN 110-17-8 CMF C4 H4 O4 Double bond geometry as shown. HO2C E CO2H | 91013-44-2P | 191013-45-3P | 191013-46-4P | 191013-47-5P | 191013-48-6P | 191013-49-7P | 191013-50-0P | 191013-51-1P | 191013-52-2P | 191013-53-3P | 191013-54-4P | 191013-55-5P | 191013-56-6P | 191013-57-7P | 191013-58-8P | 191013-69-9P | 191013-60-2P | 191013-61-3P | 191013-62-4P | 191013-63-5P | RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) | (preparation of indolealkyl derivs. of benzodioxanmethylamine as antidepressants and antipsychotic agents) | 191013-44-2 CAPLUS | 181-Indole-3-butanamide, N-[[(2S)-2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl]methyl]- (CA INDEX NAME) IT Absolute stereochemistry.

> 191013-45-3 CAPLUS 1H-Indole-3-butanamide, N-[{2,3-dihydro-7-hydroxy-1,4-benzodioxin-2-

L6 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) y1)methy1}- (CA INDEX NAME)

RN 191013-46-4 CAPLUS
CN 1H-Indole-3-propanamide, N-[(2,3-dihydro-1,4-benzodioxin-2-y1)methyl]-5(phenylmethoxyl) (CA INDEX NAME)

RN 191013-47-5 CAPLUS
CN H-Indole-3-propanamide, N-[(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-y1)methyl]-5-(phenylmethoxy)- (CA INDEX NAME)

RN 191013-48-6 CAPLUS
CN 1H-Indole-3-propanamine, N-[(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-y1)methyl)-5-(phenylmethoxy)-, monohydrochloride (9CI) (CA INDEX NAME)

L6 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 191013-52-2 CAPLUS
CN 1H-Indole-3-butanamide, N-[{2,3-dihydro-7-[(methylsulfonyl)amino]-1,4-benzodioxin-2-yl]methyl}- (CA INDEX NAME)

RN 191013-53-3 CAPLUS
CN 1H-Indole-3-butanamide, N-{{2,3-dihydro-7-{(methylsulfonyl)amino}-1,4-benzodioxin-2-yl}methyl}-5-methoxy- (CA INDEX NAME)

RN 191013-54-4 CAPLUS
CN 1H-Indole-3-propanamide, N-[(2,3-dihydro-7-hydroxy-1,4-benzodioxin-2-yl)methyl)- (CA INDEX NAME)

L6 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS ON STN (Continued)
MEO CH2-NH- (CH2) 3

● HC1

RN 191013-49-7 CAPLUS
CN 1H-Indole-3-propanamide, N-[(2,3-dihydro-7-hydroxy-1,4-benzodioxin-2-yl)methyl1-5-hydroxy- (CA INDEX NAME)

RN 191013-50-0 CAPLUS
CN IH-Indole-3-butanamide, N-{(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-y1)methy1]-5-methoxy- (CA INDEX NAME)

RN 191013-51-1 CAPLUS
CN 1H-Indole-3-butanamide, N-[(2,3-dihydro-7-hydroxy-1,4-benzodioxin-2-y1)methyl]-5-methoxy- (CA INDEX NAME)

L6 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 191013-55-5 CAPLUS
CN 1H-Indole-3-butanamide, N-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl](CA INDEX NAME)

RN 191013-56-6 CAPLUS
CN 1H-Indole-3-propanamide, N-[(2,3-dihydro-1,4-benzodioxin-2-y1)methy1)(CA INDEX NAME)

RN 191013-57-7 CAPLUS
CN 1H-Indole-3-butanamide, N-[(2,3-dihydro-1,4-benzodioxin-2-y1)methyl]-5-fluoro- (CA INDEX NAME)

ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

(CH₂)₃

191013-58-8 CAPLUS
1H-Indole-3-butanamide, N-[(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl)methyl]-5-fluoro (CA INDEX NAME)

- CH2-NH-C==O (CH₂)₃

RN 191013-59-9 CAPLUS CN 1H-Indole-3-propanamide, N-[[(2S)-2,3-dihydro-7-hydroxy-1,4-benzodioxin-2-yl]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

191013-60-2 CAPLUS 19:013-00-2 CAPEGS
HF-Indole-3-propanamide, N-[{(2S)-2,3-dihydro-7-{(methylsulfonyl)amino]-1,4-benzodioxin-2-yl]methyl}- (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

REFERENCE COUNT: THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

191013-61-3 CAPLUS
1H-Indole-3-butanamide, N-{(2,3-dihydro-1,4-benzodioxin-2-y1)methyl}-5-fluoro-1-methyl- (CA INDEX NAME)

191013-62-4 CAPLUS 1H-Indole-3-butanamide, N-[(2,3-dihydro-1,4-benzodioxin-2-y1)methy1]-5-methoxy- (CA INDEX NAME)

191013-63-5 CAPLUS
1H-Indole-3-propanamide, N-[(2,3-dihydro-7-{(methylsulfonyl)amino}-1,4-benzodioxin-2-yl}methyl}-1-methyl- (CA INDEX NAME)

L6 ANSWER 4 OF 8
ACCESSION NUMBER:
1997:429564 CAPLUS
1171TLE:
171TLE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PAT	TENT I				KIN		DATE		APPLICATION NO.					DATE				
WO		343			Al		19970515			WO 1996-US17275								
	W:	AL,	ΑU,	BB,	BG,	BR,	CA,	CN,	CZ,	EE	:, (ΞE,	ΗU,	IL,	IS,	JP,	KP,	KR,
							MK,								SG,	SI,	SK,	TR,
		UA,	UZ,	٧N,	AM,	ΑZ,	BY,	KG,	ΚZ,	ME), F	Rυ,	TJ,	TM				
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		ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	BJ	, (F,	CG,	CI,	CM,	GΑ,	GN,	ML,
		MR,	NE,	SN,	TD,	TG												
CA	2236	678			Al		1997	0515		CA	199	6-2	236	678		1	9961	029
ΑU	9675	245			А		1997	0529		ΑU	199	6-7	1524	5		1	9961	029
ΑU	7042	16			В2		1999	0415										
EΡ	2236 9675 7042 8612	4 B			A1		1998	0902		EΡ	199	6-9	3771	32		1	9961	029
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	R:	ΑT,	ΒE,	CH,	DΕ,	DK,	ES,	FR,	GB,	GR	١, ١	T,	LI,	LU,	NL,	SE,	MC,	PT,
		IE,	SI,	LT,	LV,	FI,	RO											
BR	9611 1205 1074 2000 9902	406			А		1999	0105		BR	199	6-1	140	5		1	9961	029
CN	1205	700			А		1999	0120		CN	199	6-1	992	36		1	9961	029
CN	1074	414			В		2001	1107										
JΡ	2000	5001	36		т		2000	0111		JΡ	199	7-5	1822	22		1	9961	029
ΗU	9902	091			A2		2000	0228		HU	199	9-2	2091			1	9961	029
HU	9902	091			A3		2000	0328										
ΙL	1240 2106 2166	95			A		2001	1031		ΙL	199	6-1	240	95		1	9961	029
АŤ	2106	59			T		2001	1215		ΑT	199	6-9	377	32		1	9961	029
ES	2166	470			Т3		2002	0416		ES	199	6-9	3771	32		1	9961	029
ZA	9609	221			A		1998	0504		ZA	199	6-9	221			1	9961	101
TW	4980	75			В		2002	0811		TW	199	6-8	5113	3500		1	9961	105
HK	9609 4980 1015	366			A1		2002	0328		нк	199	9-1	1004	14		1	9990.	202
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OTHER SOURCE(S): MARPAT 127:50651

ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

Title compds. (I; R1, R4 R5 = H, alkyl, alkoxy, aralkoxy, alkanoyloxy,

Title compds. (I; R1, R4 R5 = H, alkyl, alkoxy, aralkoxy, alkanoyloxy, halo, CF3, amino, alkanamido, alkanesulfonamido; R4R5 = ortho substituted methylenedioxy, ethylenedioxy, propylenedioxy; R2, R3 = H, alkyl; n = 3, 4), were prepared Thus, 2,3-dihydro-1,4-benzodioxin-2-methanamine hydrochloride was heated with 5-methoxy-3-(3-bromopropyl)indole and dilaopropylethylamine in DMF at 80° to qive (2,3-dihydrobenzoll,4)dioxin-2-ylmethyl)-3[3-(5-methoxy-1H-indol-3-yl)propyl)amine. The latter showed 5-H71A receptor affinity with IC50 = 0.10 nM for displacement of (3H)-8-ONDPAT.

191012-94-9F 191012-95-0P 191012-96-1P
191012-97-2P 191012-98-3P 191012-99-4P
191013-00-0P 191013-01-1P 191013-05-5P
191013-00-0P 191013-01-1P 191013-05-5P
191013-05-6F 191013-07-7P 191013-08-8P
191013-12-7P 191013-13-5P 191013-14-6P
191013-12-7P 191013-13-5P 191013-14-6P
191013-20-4P 191013-21-5P 191013-21-5P
191013-25-0P 191013-27-1P 191013-22-6P
191013-25-0P 191013-30-6P 191013-27-1P
191013-25-0P 191013-30-6P 191013-30-PP
191013-35-1P 191013-30-6P 191013-31-PP
191013-35-1P 191013-30-5P 191013-31-PP
191013-31-87 PP 191013-31-9-5P 191013-31-9P
191013-31-87 PP 191013-31-9-5P 191013-31-9P
191013-41-9P 191013-31-9-5P 191013-31-5P
191013-41-9P 191013-31-9-5P 191013-31-5P
191013-31-87 PP 191013-31-9-5P 191013-31-5P IT

logical
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of indolylalkylaminomethylbenzodioxans as 5-HT1A receptor
ligands for treatment of depression and related disorders)
191012-94-9 CAPLUS
HH-Indole-3-butanamine, N-{(2,3-dihydro-7-methoxy-1,4-benzodioxin-2yl)methyl)- (CA INDEX NAME) (Biological

191012-95-0 CAPLUS
1,4-Benzodioxin-6-01, 2,3-dihydro-3-{[[4-(1H-indol-3-yl)butyl]amino]methyl]- (CA INDEX NAME)

ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

191013-00-0 CAPLUS
1H-Indol-5-ol, 3-{3-{{2,3-dihydro-7-hydroxy-1,4-benzodioxin-2-yl)methyl}amino|propyl}- (CA INDEX NAME)

191013-01-1 CAPLUS 1H-Indole-3-butanamine, N-{(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl)methyl}-5-methoxy- (CA INDEX NAME)

191013-02-2 CAPLUS
1,4-Benzodioxin-6-ol, 2,3-dihydro-3-[[[4-(5-methoxy-1H-indol-3-yl)butyl]amino]methyl}- (CA INDEX NAME)

191013-03-3 CAPLUS Methanesulfonamide, N-[2,3-dihydro-3-[[[4-[1H-indol-3-yl]butyl]amino]methyl]-1,4-benzodioxin-6-yl]- (CA INDEX NAME)

ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

191012-96-1 CAPLUS 1H-Indole-3-propanamine, N-{(2,3-dihydro-1,4-benzodioxin-2-yl)methyl}-5-(phenylmethoxy)- (CA INDEX NAME)

191012-97-2 CAPLUS
1H-Indo1-5-o1, 3-[3-[{(2,3-dihydro-1,4-benzodioxin-2-y1)methyl}amino]propyl]- (CA INDEX NAME)

191012-98-3 CAPLUS 1H-Indol-5-01, 3-[3-3-[3-[[(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-no)propy1]- (CA INDEX NAME) yl)methyl)amino)propyl)-

191012-99-4 CAPLUS 1H-Indole-3-propanamine, N-((2,3-dihydro-7-methoxy-1,4-benzodioxin-2-y1)methy1)-5-methoxy-N-methy1- (CA INDEX NAME)

ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

191013-04-4 CAPLUS
1H-Indole-3-propanamine, N-{(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-5-methoxy- (CA INDEX NAME)

191013-05-5 CAPLUS
1H-Indole-3-propanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-y1)methyl]-5-fluoro- (CA INDEX NAME)

191013-06-6 CAPLUS
Methanesulfonamide, N-[2,3-dihydro-3-[[[4-{5-methoxy-1H-indol-3-yl)butyl]amino]methyl]-1,4-benzodioxin-6-yl]- (CA INDEX NAME)

191013-07-7 CAPLUS 1,4-Benzodioxin-6-ol, 2,3-dihydro-3-[[[3-(1H-indol-3-yl)propyl]amino]methyl]- (CA INDEX NAME)

ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

191013-08-8 CAPLUS
1H-Indole-3-butanamine, N-{(2,3-dihydro-1,4-benzodioxin-2-y1)methy1}-

191013-09-9 CAPLUS

1H-Indole-3-propanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-y1)methy1]-(CA INDEX NAME)

CH2-NH- (CH2) 3-

191013-10-2 CAPLUS
1H-Indole-3-butanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-5-fluoro- (CA INDEX NAME)

CH2-NH- (CH2)4-

191013-11-3 CAPLUS
1H-Indole-3-butanamine, N-[(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl)methyl]-5-fluoro (CA INDEX NAME)

CH2-NH- (CH2) 4

191013-12-4 CAPLUS Methaneaulfonamide, N-[2,3-dihydro-3-[[[3-(1H-indol-3-yl)propyl]amino]methyl]-1,4-benzodioxin-6-yl]- (CA INDEX NAME)

L6 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN Absolute stereochemistry. (Continued)

191013-19-1 CAPLUS
1H-Indole-3-butanamine, N-[((25)-2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yllmethyl)-, monohydrochloride (9C1) (CA INDEX NAME)

Absolute stereochemistry.

● HC1

191013-20-4 CAPLUS
1,4-Benzodioxin-6-ol, 2,3-dihydro-3-[{[4-{1H-indol-3-yl}butyl]amino]methyl]-, monohydrochloride {9CI} (CA INDEX NAME)

● HCl

191013-21-5 CAPLUS
1H-Indole-3-propanamine, N-{{2,3-dihydro-1,4-benzodioxin-2-yl}methyl}-5-(phenylmethoxy)-, monohydrochloride (9CI) (CA INDEX NAME)

● HC1

ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

191013-13-5 CAPLUS
1H-Indole-3-butanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-y1)methyl]-5-fluoro-1-methyl- (CA INDEX NAME)

(Continued)

191013-14-6 CAPLUS
1H-Indole-3-butanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-y1)methy1]-5-methoxy- (CA INDEX NAME)

191013-15-7 CAPLUS Methanesulfonanide, N-[2,3-dihydro-3-[[[3-(1-methyl-1H-indol-3-yl)propyl]amino|methyl)-1,4-benzodioxin-6-yl]- (CA INDEX NAME)

191013-18-0 CAPLUS 1H-Indole-3-butanamine, N-[[(2S)-2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yllmethyl]- (CA INDEX NAME)

ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 1

CRN 191012-97-2 CMF C20 H22 N2 O3

CM 2

Double bond geometry as shown.

E CO2H HO2C

191013-23-7 CAPLUS 1H-Indol-5-01, 3-[3-[[(2,3-dlhydro-7-methoxy-1,4-benzodioxin-2-yl)methyl]amino]propyl]-, (2E)-2-butenedioate (2:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 191012-98-3 CMF C21 H24 N2 O4

СМ

Double bond geometry as shown.

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ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
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                                                                                         (Continued)
                                                                                                                                                                                                                                   (Continued)
         € со₂н
HQ2C
                                                                                                                                                                    CH2-NH- (CH2) 3
RN 191013-24-8 CAPLUS
CN 1H-Indole-3-propanamine, N-[(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl)methyl]-5-methoxy-N-methyl-, (2E)-2-butenedioate (2:1) (CA INDEX NAME)
                                                                                                                                                  CM 2
        CM 1
                                                                                                                                                  CRN 110-17-8
CMF C4 H4 O4
        CRN 191012-99-4
CMF C23 H28 N2 O4
                                                                                                                                          Double bond geometry as shown.
                                                                                                                                          HO2C E CO2H
                                 (CH<sub>2</sub>)<sub>3</sub>
                                                                                                                                                191013-26-0 CAPLUS
1H-Indole-3-butanamine, N-[(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl)methyl}-5-methoxy-, (2Z)-2-butenedioate (1:1) (CA INDEX NAME)
                                                                                                                                                  CRN 191013-01-1
CMF C23 H2B N2 O4
       CM 2
        CRN 110-17-8
CMF C4 H4 O4
                                                                                                                                                                     CH2-NH- (CH2) 4
Double bond geometry as shown.
но2с Е со2н
                                                                                                                                                  CM 2
      191013-25-9 CAPLUS
1H-Indol-5-01, 3-[3-[{[2,3-dihydro-7-hydroxy-1,4-benzodioxin-2-yl)methyl]amino)propyl]-, (2E)-2-butenedioate (2:1) (salt) (9CI) (CA INDEX NAME)
                                                                                                                                                  CRN 110-16-7
CMF C4 H4 O4
                                                                                                                                           Double bond geometry as shown
        CRN 191013-00-0
CMF C20 H22 N2 O4
                                                                                                                                           HO<sub>2</sub>C
                                                                                                                                                        со2н
                                                                                                                                          RN 191013-27-1 CAPLUS
CN 1,4-Benzodioxin-6-o1, 2,3-dihydro-3-[[[4-(5-methoxy-lH-indol-3-y1)butyl]amino]methyl]-, (2E)-2-butenedioate (2:1) (salt) (9CI) (CA INDEX
       ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN NAME)
                                                                                                                                                  ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
191013-29-3 CAPLUS
HH-Indole-3-propanamine, N-{(2,3-dihydro-1,4-benzodioxin-2-y1)methyl}-5-
methoxy-, (2E)-2-butenedioate (2:1) (CA INDEX NAME)
                                                                                         (Continued)
        CM 1
                                                                                                                                                  CM 1
        CRN 191013-02-2
CMF C22 H26 N2 O4
                                                                                                                                                  CRN 191013-04-4
CMF C21 H24 N2 O3
                         CH2-NH- (CH2) 4
                                                                                                                                                             CH2-NH- (CH2) 3
        CM 2
                                                                                                                                                  CM 2
                                                                                                                                                  CRN 110-17-8
CMF C4 H4 O4
Double bond geometry as shown.
                                                                                                                                           Double bond geometry as shown.
HO2C E CO2H
                                                                                                                                          HO2C E CO2H
        191013-28-2 CAPLUS Methanesulfonamide, N-{2,3-dihydro-3-{[{4-{1H-indol-3-ylbutyl]amino]methyl}-1,4-benzodioxin-6-yl}-, (2E}-2-butenedioate (2:1) (CA INDEX NAME)
                                                                                                                                                  191013-30-6 CAPLUS
1H-Indole-3-propanamine, N-[{2,3-dihydro-1,4-benzodioxin-2-yl}methyl]-5-fluoro-, (2E)-2-butenedioate (2:1) (CA INDEX NAME)
        CM 1
                                                                                                                                                  CM 1
        CRN 191013-03-3
CMF C22 H27 N3 O4 S
                                                                                                                                                  CRN 191013-05-5
CMF C20 H21 F N2 O2
                                                                                                                                                             CH2-NH- (CH2) 3
                                  CH2-NH- (CH2) 4
                                                                                                                                                  CM 2
        CM 2
                                                                                                                                                  CRN 110-17-8
CMF C4 H4 O4
                                                                                                                                           Double bond geometry as shown.
 Double bond geometry as shown.
                                                                                                                                          но2С СО2Н
                                                     )
HO2C E CO2H
                                                                                                                                           RN 191013-31-7 CAPLUS
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ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
Methanesulfonamide, N-[2,3-dihydro-3-[[[4-(5-methoxy-1H-indol-3-
yl)butyl]amino|methyl]-1,4-benzodioxin-6-yl}-, (2E)-2-butenedioate (2:1)
(CA INDEX NAME)
         CM 1
         CRN 191013-06-6
CMF C23 H29 N3 O5 S
                                     CH2-NH- (CH2) 4
         CM 2
         CRN 110-17-8
CMF C4 H4 Q4
Double bond geometry as shown.
но2С СО2Н
      191013-32-8 CAPLUS
1,4-Benzodioxin-6-ol, 2,3-dihydro-3-[{[3-{lH-indol-3-
yl)propyl]amino]methyl]-, (2E)-2-butenedioate (2:1) {salt} (9CI) (CA
INDEX NAME)
         CRN 191013-07-7
CMF C20 H22 N2 O3
                           CH2-NH- (CH2) 3
         CM 2
         CRN 110-17-8
CMF C4 H4 O4
        ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN CRN 110-17-8 CMF C4 H4 O4
                                                                                                (Continued)
Double bond geometry as shown.
но2с Е со2н
        191013-35-1 CAPLUS
1N-Indole-3-butanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-5-
fluoro-, (2E)-2-butenedioate (2:1) (CA INDEX NAME)
         CM 1
         CRN 191013-10-2
CMF C21 H23 F N2 Q2
                    CH2-NH- (CH2) 4
         CM 2
         CRN 110-17-8
CMF C4 H4 O4
Double bond geometry as shown.
HO2C E CO2H
        191013-36-2 CAPLUS
1H-Indole-3-butanamine, N-[(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl)methyl]-5-fluoro-, (2E)-2-butenedioate (2:1) (CA INDEX NAME)
         CM 1
         CRN 191013-11-3
CMF C22 H25 F N2 O3
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L6 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN Double bond geometry as shown. (Continued) HO2C E CO2H 191013-33-9 CAPLUS
1H-Indole-3-butanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-, (ZE)-2-butenedioate (2:1) (CA INDEX NAME) CRN 191013-08-8 CMF C21 H24 N2 O2 CH2-NH- (CH2) 4 CM 2 CRN 110-17-8 CMF C4 H4 O4 Double bond geometry as shown. HO2C E CO2H 191013-34-0 CAPLUS
1H-Indole-3-propanamine, N-[{2,3-dihydro-1,4-benzodioxin-2-yl}methyl}-, {2E}-2-butenedioate {2:1} (CA INDEX NAME) CH2-NH- (CH2) 3 L6 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) CMF C4 H4 O4 Double bond geometry as shown. но2С Е СО2Н 191013-37-3 CAPLUS
1,4-Benzodioxin-6-ol, Z,3-dihydro-3-{{[3-(1H-indol-3-yl)propyl]amino|methyl]-, (3S)- (CA INDEX NAME) Absolute stereochemistry. 191013-38-4 CAPLUS
1,4-Benzodioxin-6-ol, 2,3-dihydro-3-[[[3-{lH-indol-3-yl)propyl]amino]methyl]-, (38)-, (2E)-2-butenedioate (2:1) (salt) (9CI) (CA INDEX NAME) CM 1 CRN 191013-37-3 CMF C20 H22 N2 O3 Absolute stereochemistry. CM 2 CRN 110-17-8 CMF C4 H4 O4 Double bond geometry as shown. но2С СО2Н . 191013-39-5 CAPLUS Methanesulfonamide, N-[(35)-2,3-dihydro-3-[[[3-(1H-indol-3-yl)propyl]amino]methyl]-1,4-benzodioxin-6-yl]- (CA INDEX NAME) Absolute stereochemistry.

L6 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

191013-40-8 CAPLUS
Methanesulfonamide, N-{(3S)-2,3-dihydro-3-{[[3-{1H-indol-3-yl)propyl]amino]methyl}-1,4-benzodioxin-6-yl]-, (2E)-2-butenedioate (2:1)
(CA INDEX NAME)

См 1

CRN 191013-39-5 CMF C21 H25 N3 O4 S

Absolute stereochemistry.

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

191013-41-9 CAPLUS
1H-Indole-3-butanamine, N-((2,3-dihydro-1,4-benzodioxin-2-y1)methyl)-5-fluoro-1-methyl-, (2E)-2-butenedioate (2:1) (CA INDEX NAME)

CRN 191013-13-5 CMF C22 H25 F N2 O2

ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

191013-71-5 CAPLUS
IN-Indole-3-butanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-5-methoxy-, (2E)-2-butenedioate (2:1) (CA INDEX NAME)

CM 1

CRN 191013-14-6 CMF C22 H26 N2 O3

CH2-NH- (CH2) 4

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

ΙT

Absolute stereochemistry.

L6 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

191013-42-0 CAPLUS
Methaneaulfonamide, N-[2,3-dihydro-3-[[[3-(1-methyl-1H-indol-3-yl)propyl]amino]methyl]-1,4-benzodioxin-6-yl]-, (2E)-2-butenedioate (2:1)
(CA INDEX NAME)

CM 1

CRN 191013-15-7 CMF C22 H27 N3 O4 S

Double bond geometry as shown.

E CO2H HO2C

L6 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

191013-45-3 CAPLUS
1H-Indole-3-butanamide, N-[(2,3-dihydro-7-hydroxy-1,4-benzodioxin-2-yl)methyl]- (CA INDEX NAME)

191013-46-4 CAPLUS
1H-Indole-3-propanamide, N-{(2,3-dihydro-1,4-benzodioxin-2-yl)methyl}-5-(phenylmethoxy)- (CA INDEX NAME)

191013-47-5 CAPLUS

H-Indole-3-propanamide, N-[(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl)methyl)-5-(phenylmethoxy)- (CA INDEX NAME)

L6 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 191013-48-6 CAPLUS
CN 1H-Indole-3-propanamine, N-[(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl)methyl]-5-(phenylmethoxy)-, monohydrochloride (9CI) (CA INDEX NAME)

HC1

RN 191013-49-7 CAPLUS
CN 1H-Indole-3-propanamide, N-{(2,3-dihydro-7-hydroxy-1,4-benzodioxin-2-yl)methyl)-5-hydroxy- (CA INDEX NAME)

RN 191013-50-0 CAPLUS
CN 1H-Indole-3-butanamide, N-{(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl)methyl}-5-methoxy- (CA INDEX NAME)

L6 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

$$\begin{array}{c} 0 \\ 0 \\ 0 \\ 0 \\ \end{array}$$

RN 191013-54-4 CAPLUS
CN H-Indole-3-propanamide, N-[(2,3-dihydro-7-hydroxy-1,4-benzodioxin-2-yl)methyl]- (CA INDEX NAME)

RN 191013-55-5 CAPLUS CN 1H-Indole-3-butanamide, N-{{2,3-dihydro-1,4-benzodioxin-2-y1}methyl}-(CA

RN 191013-56-6 CAPLUS
CN 1H-Indole-3-propanamide, N-[(2,3-dihydro-1,4-benzodioxin-2-y1)methyl](CA INDEX NAME)

L6 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 191013-51-1 CAPLUS
CN H-Indole-3-butanamide, N-[(2,3-dihydro-7-hydroxy-1,4-benzodioxin-2-y1)methyl1-5-methoxy- (CA INDEX NAME)

RN 191013-52-2 CAPLUS
CN lH-Indole-3-butanamide, N-{{2,3-dihydro-7-{{methylsulfonyl}amino}-1,4-benzodioxin-2-yl|methyl}- (CA INDEX NAME)

RN 191013-53-3 CAPLUS
CN 1H-Indole-3-butanamide, N-[[2,3-dihydro-7-[(methylsulfonyl)amino]-1,4-benzodioxin-2-yl]methyl]-5-methoxy- (CA INDEX NAME)

L6 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 191013-57-7 CAPLUS
CN IN-Indole-3-butanamide, N-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-5fluoro- (CA INDEX NAME)

RN 191013-58-8 CAPLUS
CN 1H-Indole-3-butanmide, N-[(2,3-dihydro-7-methoxy-1,4-benzodioxin-2-yl)methyl)-5-fluoro- (CA INDEX NAME)

RN 191013-59-9 CAPLUS
CN 1H-Indole-3-propanamide,
N-{{(2S)-2,3-dihydro-7-hydroxy-1,4-benzodioxin-2-yl}methyl}- (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

191013-60-2 CAPLUS
1H-Indole-3-propanamide, N-[[[23]-2,3-dihydro-7-[[methylsulfonyl]amino]-1,4-benzodioxin-2-yllmethyll- (CA INDEX NAME)

Absolute stereochemistry.

191013-61-3 CAPLUS
1H-Indole-3-butanmide, N-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-5fluoro-1-methyl- (CA INDEX NAME)

191013-62-4 CAPLUS
1H-Indole-3-butanamide, N-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-5-methoxy- (CA INDEX NAME)

L6 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 1993:204695 CAPLUS DOCUMENT NUMBER: 118:204695 TITLE: 3-D GRAP for 1-1-1 3-D QSAR for intrinsic activity of 5-HT1A receptor ligands by the method of comparative molecular field

ingands by the method of comparative molecular fit analysis Agarwal, Atul; Taylor, Ethan Will Comput. Cent. Mol. Struct. Des., Univ. Georgia, Athens, GA, 30602-2352, USA Journal of Computational Chemistry (1993), 14(2), 237-45 CODEN, JCCUED, 188N, 0192-861

CODEN: JCCHDD; ISSN: 0192-8651

COURT OCCURENT TYPE: Journal LANGUAGE: English

AB The affinity of a ligand for a receptor is usually expressed in terms of the dissociation constant (Ki) if the drug-receptor complex, conveniently measured by the inhibition of radioligand binding. However, a ligand can be an antagonist, a partial agonist, or a full agonist, a property

independent of its receptor affinity. This property can be quantitated

intrinsic activity (IA), which can range from 0 for a full antagonist to

for a full agonist. Although QSAR methods have been applied for the prediction of receptor affinity with considerable success, the prediction of IA, even qual., has rarely been attempted. Because most traditional QSAR methods are limited to congeneric series, and there are often major structural differences between agonists and antagonists, this lack of success in predicting IA is understandable. To overcome this limitation, the authors used the method of comparative mol. field anal. (COMFA), which, unlike traditional Hansch anal., permits the inclusion of structurally diswiniar compds. in a single QSAR model. A structurally diverse set of 5-hydroxytryptamine IA (5-HTIA) receptor ligands, with literature IA data (determined by the inhibition of 5-HT sensitive forskolin-stimulated adenylate cyclase), was used to develop a 3-D QSAR model correlating intrinsic activity with mol. structure properties of 5HTIA receptor ligands. This COMFA model had a cross validated r2 of 0.481, five components and final conventional f2 of 0.943. The receptor model suggests that agonist and antagonist ligands can share parts of a common binding site on the receptor, with a primary agonist binding on

region
that is also occupied by antagonists and partial agonists. The COMFA
steric field graph clearly shows that agonists tend to be "flatter" (mc
coplanar) than antagonists, consistent with the difference between the
5-HTLA agonist and antagonist pharmacophores proposed by Hibert and
coworkers. The COMFA electrostatic field graph suggests that, in the
region surrounding the essential protonated sliphatic amino group, the

mol. electrostatic potential may be weaker in antagonists as compared to agonists. Together, the steric and electrostatic maps suggest that in

secondary binding site region increased hydrophobic binding may enhance antagonist activity. These can successfully distinguish between agonist and antagonist 5-HTIA ligands. This is the first time this or any other GSAR method has been successfully applied to the correlation of structure with IA rather than potency or affinity. The anal, has suggested various structural features associated with agonist and antagonist behaviors of 5-HTIA ligands and thus should assist in the future design of drugs that act via 5-HTIA receptors.

Page 158

ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

191013-63-5 CAPLUS lH-Indole-3-propanamide, N-{[2,3-dihydro-7-{(methylsulfonyl)amino]-1,4-benzodioxin-2-yl]methyl]-1-methyl- (CA INDEX NAME)

ANSWER 5 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RL: BIOL (Biological study)
(intrinsic activity of, as serotonin SIA receptor ligand, QSAR for,
mol. field anal. of)
116728-30-70 CAPLUS

1H-Indole-3-ethanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl}-5methoxy- (CA INDEX NAME)

L6 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 1990:151250 CAPLUS DOCUMENT NUMBER: 112:151250

112:151250
MDL 73005EF: partial agonist at the 5-HTIA receptor negatively linked to adenylate cyclase Cornfield, Linda J.; Nelson, David L.; Taylor, E. W.; Martin, A. R.
Coll. Pharm., Univ. Arizona, Tucson, AZ, 85721, USA European Journal of Pharmacology (1989), 173(2-3), 189-92 TITLE:

AUTHOR (S):

CORPORATE SOURCE: SOURCE:

CODEN: EJPHAZ; ISSN: 0014-2999 Journal English

DOCUMENT TYPE: LANGUAGE: GI

MDL 73005EF (I) has been recently described as a potent, highly selective 5-HT1A ligand. Although proposed to act predominantly as an antagonist, it was demonstrated that I also acts as a highly efficacious partial agonist at the 5-HT1A receptor, based on its ability to inhibit forskelin-stimulated adenylate cyclase in rat hippocampal membranes. Compared with two structurally related 5-HT1A partial agonists, the rank order of potency of I in the forskelin-stimulated adenylate cyclase assay was comparable to affinity calculated by radioligand binding. 116729-30-7
RE: BIOL (Biological study)
(serotoninergic SIA receptor partial agonist, in brain hippocampus, adenylate cyclase in)
116729-30-7 CAPLUS
IH-Indole-3-ethanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-5-methoxy- (CA INDEX NAME)

ANSWER 8 OF 8 CAPLUS COPYRIGHT 2007 ACS ON STN SSION NUMBER: 1964:52778 CAPLUS MENT NUMBER: 60:52778

ACCESSION NUMBER: DOCUMENT NUMBER:

ORIGINAL REFERENCE NO. : 60:9287d-f

1,4-Benzodioxan-2-carboxamides Bid, John H.: Judd, Claude I. Lakeside Laboratories, Inc. INVENTOR (S):

PATENT ASSIGNEE(S):

2 pp. Patent DOCUMENT TYPE:

LANGUAGE: Unavailable FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. US 3117978 PRIORITY APPLN. INFO.: 19640114 US 1961-84753 US 19610125

GI For diagram(s), see printed CA Issue.

AB The title compds., possessing antidepressant and central nervous system stimulating properties, are prepared by treating

1,4-benzodioxan-2-carbonyl

chloride (I) with an aralkylamine in an inert solvent in the presence of an acid acceptor. Thus, 7.5 g, trans-2-phenylcyclopropylamine, 10.1 g.

KZCO3, and 50 ml. anhydrous C6H6 is treated dropwise with 11.2 g. I, the mixture stirred several hrs. at room temperature, 100 ml. H2O added, the C6H6

layer separated, and the solvent evaporated to give $16.0\ \mathrm{g}.$ of an oil which

crystallized when covered with n-hexane and Et2O to yield 7.5 g.
N-(trans-2-phenyleyclopropyl)-1,4-benzodioxan-2-carboxamide (Ia), m.
96-112*. Recrystn. from Et2O gave 3.1 g. pure product, m.
129-31*. Also prepared are N-(2-phenyl-1-propyl)-1,4-benzodioxan-2-carboxamide, m. 82-90* (mixture of isomers), and N(1-(3-indoyl)-2-butyl)-1,4-benzodioxan-2-carboxamide (II), m. 99-102*. A single pure isomer of II was also isolated, m. 135-8*.
94862-17-6P, 1,4-Benzodioxan-2-carboxamide, N-(1-(indol-3-ylmethyl)propyl)RL: PREP (Preparation)
(preparation of)
94862-17-6 CAPLUS
1,4-Benzodioxan-2-carboxamide, N-(1-(indol-3-ylmethyl)propyl)- (7CI) (CA INDEX NAME)

ANSWER 7 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN SSION NUMBER: 1988:542399 CAPLUS MENT NUMBER: 109:142399

ACCESSION NUMBER:

Use of forskolin stimulated adenylate cyclase in rat hippocampus as a screen for compounds that act TITLE:

through

AUTHOR (S):

5-HTRIA receptors
Cornfield, L. J.; Nelson, D. L.; Monroe, P. J.;
Taylor, E. W.; Nikam, S. S.
Coll. Pharm., Univ. Arizona, Tucson, AZ, 85721, USA
Proceedings of the Western Pharmacology Society
(1988), 31, 265-7
CODEN: PMPSA8; ISSN: 0083-8969
JOURNAL CORPORATE SOURCE: SOURCE:

CODEN: FWPSAB; ISSN: 0083-8969

DOCUMENT TYPE: Journal
LANGUAGE: English
AB 5-HT, buspirone and 8-hydroxy-2-(di-n-propylamino)tetralin (8-OH-DPAT)
inhibited forskolin stimulated cAMP production in rat hippocampus with

inhibited forskolin stimulated cAMP production in rat hippocampus with ing degrees of efficacy. The EC50 values for these compds, in the cyclase assay system were uniformly less than the IC50 values against [3H]8-OH-DPAT binding, although a reasonably good correlation was found between the EC50 and IC50 values for these compds.

-(5-Methoxyindole-(5-Methoxyindole-(1-4-phenyl-1,2,3,6-tetrahydropyrid-1-yl)ethylindole and 5-methoxy-3(2-(4-phenyl-1,2,3,6-tetrahydropyrid-1-yl)ethylindole, and spiroxatrine exhibited potential 5-HTIA agonistic activity, as shown by varying degrees of inhibition of forskolin-stimulated adenylate cyclase. However, there was no correlation between the potencies of the cyclase data and the [3H]-8-OH-DPAT binding data for these 4 compds. Spiroxatrine produced a complex inhibition curve with a maximal inhibition that was greater than that observed with 5-HT itself. Nonlinear regression anal. of this curve revealed high and low potency components. The ratio of the EC50 for the high-potency component to the IC50 value at 5-HTIA binding sites was consistent with that for the other 5-HTIA agonists, 5-HT, 8-OH-DPAT and bingings.

consistent with that for the other 3-HTM agonists, 3-HT, 8-UH-DEAR and bispirone.

116729-30-7

(forskolin-stimulated adenylate cyclase of brain response to)

116729-30-7 CAPLUS

H-Indole-3-ethanamine, N-[(2,3-dihydro-1,4-benzodioxin-2-y1)methyl}-5-methoxy- (CA INDEX NAME)

=>

---Logging off of STN---

=>

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